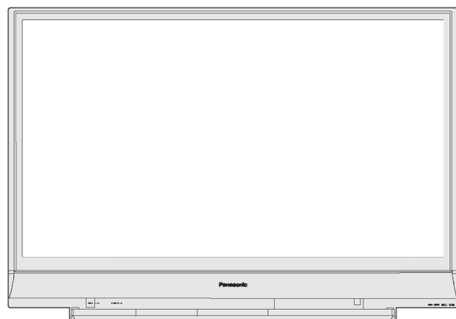


Service Manual

Multi Media Display



PbF
Solder Lead free

PT-52LCX66-K
PT-56LCX16-K
PT-61LCX66-K

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Safety Precautions

1.1. General Guidelines

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC Plug before disassembling this unit.
3. It is advisable to use an isolation transformer in the AC supply before servicing.
4. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
5. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shield, and isolation R-C combinations etc. are properly installed.
6. After servicing, be sure to restore the wires, leads, insulation barriers, shields, etc.
7. After servicing, make the leakage current checks to prevent the customer from being exposed to shock hazards.

Caution:

Use a separate Isolation Transformer for this unit when servicing.

1.2. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. For physically operated power switches, turn power on. Otherwise skip step 2.
3. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screwheads, connectors, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1 M Ω and 12 M Ω . When the exposed metal does not have a return path to the chassis, the reading must be infinity.

1.3. Leakage Current Hot Check

1. Plug the AC cord directly into the AC outlet.
Do not use an isolation transformer for this check.
2. Connect "A" to exposed metallic part on the set. And connect "B" to a good earth ground, as shown in Figure 1.
3. Use an AC voltmeter, with 1 k Ω /V or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.25 V RMS.
A leakage current tester (Simpson Model 228 equivalent) may be used to make the hot checks. Leakage current must not exceed 1/2 mA. In case a measurement is outside of the limits specified, there is a possibility of shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

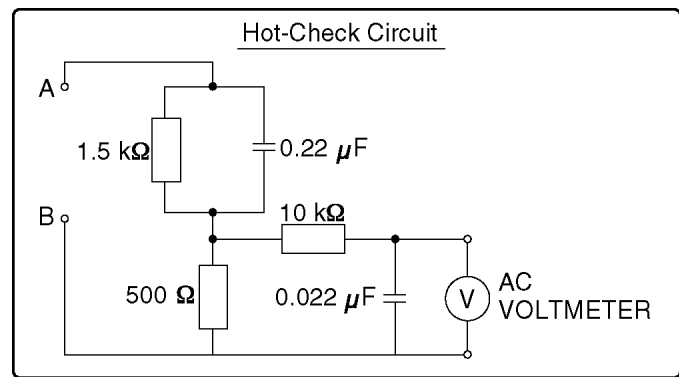


Figure 1

1.4. UV-Precaution

1. Be sure to disconnect the AC Plug when replacing the lamp.
2. Since the lamp reaches a very high temperature during its operation, wait until it has completely cooled off when replacing the Lamp Unit.
3. The lamp emits small amounts of UV-Radiation.
Avoid direct-eye contact by covering the Lamp and wearing the UV protective glasses.
4. The high pressure lamp involves a risk of explosion.

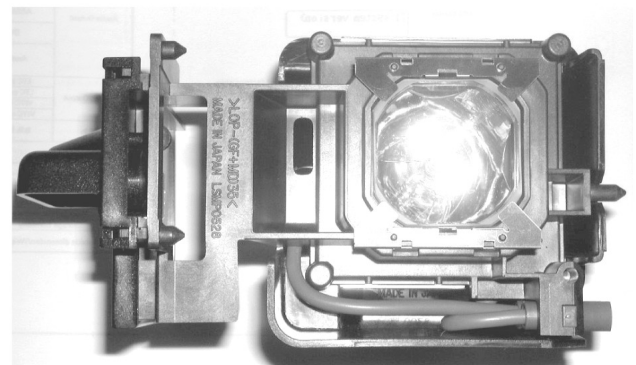


Figure 2

This product has a High Intensity Discharge (HID) lamp that contains a small amount of mercury. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: <<http://www.eiae.org>>

2 Warning

2.1. Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an antistatic solder removal device. Some solder removal devices not classified as "antistatic (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION :

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

3 Service Navigation

3.1. Introduction

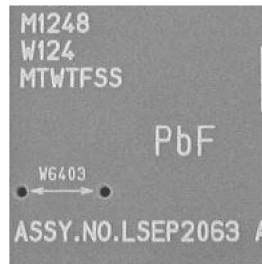
This service manual contains technical information which will allow service personnel's to understand and service this model. Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

3.2. About Lead Free Solder (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF printing on the PCB.
(Please refer to figures.)



Printed case

CAUTION:

- Pb free solder has a higher melting point than standard solder;
Typically the melting point is 50 °F - 70 °F (30 °C - 40 °C) higher.
Please use a soldering iron with temperature control and adjust it to 700 °F±20 °F (370 °C± 10 °C).
In case of using high temperature soldering iron, please be careful not to heat too long.
- Pb free solder will tend to splash when heated too high (about 1100 °F/600 °C).
- All products with the printed circuit board with PbF stamp or printing must be serviced with lead free solder.
When soldering or unsoldering, completely remove all of the solder from the pins or solder area,
and be sure to heat the soldering points with the lead free solder until it melts sufficiently.

Recommendations

Recommended lead free solder composition is Sn96.5 Ag3.0 Cu0.5.

4 Specifications

ITEM		SPECIFICATION	1	2	3	4	5	6
Power Source		AC 120 V, 60 Hz	○	○	○	○	○	○
Power Consumption		Power ON: Approx. 190 W (When audio is at maximum) Power OFF: Approx. 0.4 W (When cooling fan is stopped)	○	○	○	○	○	○
LCD panels		0.7" Poly silicon TFT LCD panel × 3 921 600 (1 280 × 720) stripe pixels × 3 panels (16:9)	○	○	○	○	○	○
Display	52-inch, 16 : 9 aspect ratio		○	–	–	○	–	–
	56-inch, 16 : 9 aspect ratio		–	○	–	–	○	–
	61-inch, 16 : 9 aspect ratio		–	–	○	–	–	○
Speaker		2 Speakers 20 W [10 W + 10 W] (10 % THD)	○	○	○	○	○	○
HID Lamp		100 W HID (High Intensity Discharge) Lamp	○	○	○	○	○	○
Channel Capability (Digital/Analog)		VHF/UHF 2-69 Cable 1-135	○	○	○	○	○	○
Input Terminals	PC INPUT	RGB analog 0.7 Vp-p (75 Ω) (D-SUB 15P) AUDIO 0.5 Vrms (M3 Stereo mini Pin Jack)	○	○	○	○	○	○
	AV INPUT 1-3	VIDEO 1.0 Vp-p (75 Ω) (RCA Pin Jack) S-VIDEO Y: 1 Vp-p (75 Ω), C: 0.286 Vp-p (75 Ω) (Mini DIN 4 pin) AUDIO L-R 0.5 Vrms (RCA Pin Jack × 2)	○	○	○	○	○	○
	COMPONENT VIDEO INPUT 1-2	Y 1.0 Vp-p (with sync) (75 Ω) (Pin Jack) PB / PR ± 0.35 Vp-p (75 Ω) (Pin Jack × 2) AUDIO L-R 0.5 Vrms (RCA Pin Jack × 2)	○	○	○	○	○	○
	HDMI	HDMI type A Connector AUDIO L-R 0.5 Vrms (RCA Pin Jack Type × 2)	○	○	○	–	–	–
	HDMI 1-2	HDMI type A Connector AUDIO L-R 0.5 Vrms (RCA Pin Jack Type × 2)	–	–	–	○	○	○
SD Card slot		SD Card (8 MB/ 16 MB/ 32 MB/ 64 MB/ 128 MB/ 256 MB/ 512 MB/ 1 GB/ 2 GB (Maximum))	○	○	○	○	○	○
Output signals (AV OUT)		VIDEO 1.0 Vp-p (75 Ω) (RCA Pin Jack) AUDIO L-R 0.5 Vrms (RCA Pin Jack × 2)	○	○	○	○	○	○
Dimensions (W × H × D)	1 232 mm (W) × 867 mm (H) × 420 mm (D) 48-1/2" (W) × 34-1/8" (H) × 16-9/16" (D)		○	–	–	○	–	–
	1 321 mm (W) × 925 mm (H) × 446 mm (D) 52" (W) × 36-7/16" (H) × 17-9/16" (D)		–	○	–	–	○	–
	1 431 mm (W) × 999 mm (H) × 479 mm (D) 56-5/16" (W) × 39-5/16" (H) × 18-7/8" (D)		–	–	○	–	–	○
Weight (Mass)	31 kg (68 lbs.) Net		○	–	–	○	–	–
	33 kg (73 lbs.) Net		–	○	–	–	○	–
	35 kg (77 lbs.) Net		–	–	○	–	–	○
Operating conditions		Temperature : 0 °C – 35 °C (32 °F - 95 °F) Humidity : 20 % – 80 % (non-condensing)	○	○	○	○	○	○
Solder		This model uses lead free solder (PbF).	○	○	○	○	○	○

1. -----

2. -----

3. -----

4. PT-52LCX66-K

5. PT-56LCX16-K

6. PT-61LCX16-K

Design and Specifications are subject to change without notice.

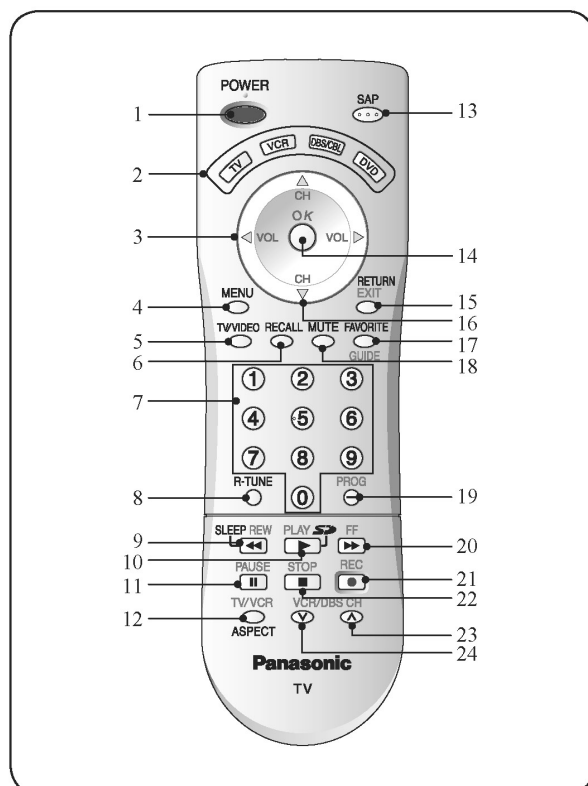
Weight and Dimensions shown are approximate.

5 Location of Controls and Components

5.1. Operation Instructions

Location of Controls

Illuminated Remote Control



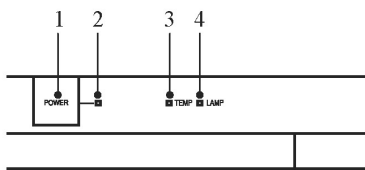
1	POWER	Press to turn ON and OFF.
2	TV	Sets the remote to control television or digital television.
	VCR, DBS/CBL, DVD	Sets the remote to control other devices.
3	VOL + / <	Press to adjust TV sound and to navigate menus.
4	MENU	Press to display Main Menu.
5	TV/VIDEO	Changes Input source.
6	RECALL	Press to display or delete Channel banner.
7	NUMBER	Press numeric keypad to select any channel or to make alpha-numeric entries in menus.
8	R-TUNE	Press to switch to previously viewed channel or input modes.

9	SLEEP	Sets unit to shut itself off after a preselected amount of time.
	REW	While remote is in VCR or DVD mode, press to rewind.
10	PLAY	While remote is in VCR or DVD mode, press to play.
	SD	Accesses the Photo Viewer feature.
11	PAUSE	While remote is in VCR or DVD mode, press to pause.
12	TV/VCR	Press to switch to TV or VCR.
	ASPECT	Changes display aspect ratio.
13	SAP	In analog mode, press to access audio modes (Stereo, SAP or Mono). In digital mode, press to access next audio track.
14	OK	Press to select menu and sub-menu items.
15	RETURN	Press to return one step backward in menus.
	EXIT	Press to exit menus.
16	CH ▲ ▼	Press to change channels and to navigate menus.
17	FAVORITE	Press to operate the Favorite channel list function.
18	MUTE	Press to mute sound.
19	PROG	Press after entering a digital channel to enter a sub-channel.
20	FF	While remote is in VCR or DVD mode, press to fast forward.
21	REC	While remote is in VCR mode, press to record.
22	STOP	While remote is in VCR or DVD mode, press to stop.
23	VCR/DBS CH ^	While remote is in VCR or DBS mode, press to change VCR or DBS channels.
24	VCR/DBS CH v	

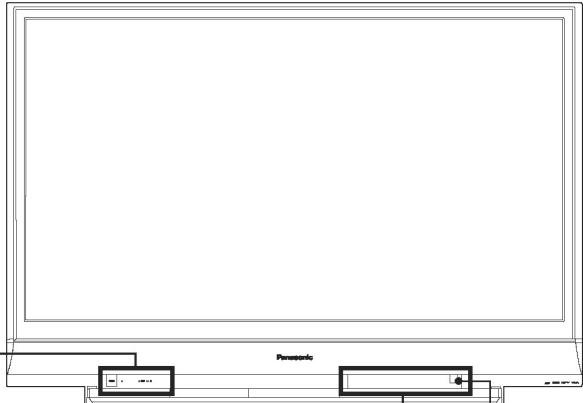
Location of Controls (continued)

Controls and Terminals on the Projection Display

Front View <Model PT-56LCX16 unit shown>



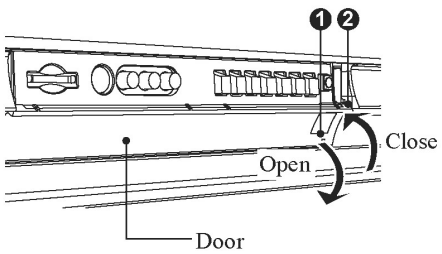
1	POWER button	Press to turn ON and OFF. (p. 63, 66)
2	POWER indicator	Lights up green when power is ON. (p. 24, 63)
3	TEMP indicator	Flashes when unit internal temperature is abnormal. (p. 63)
4	LAMP indicator	Lights up or flashes when the lamp unit is malfunctioning. (p. 63)

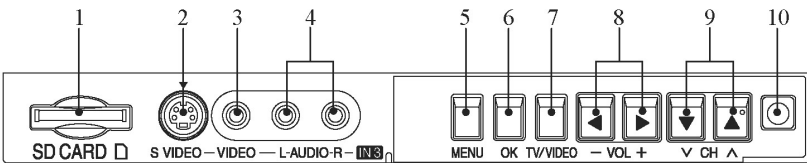


Remote Control Sensor

Open Door:
Press position ①, and slide Door open as shown by arrow.

Close Door:
Press position ②, and slide Door closed as shown by arrow.



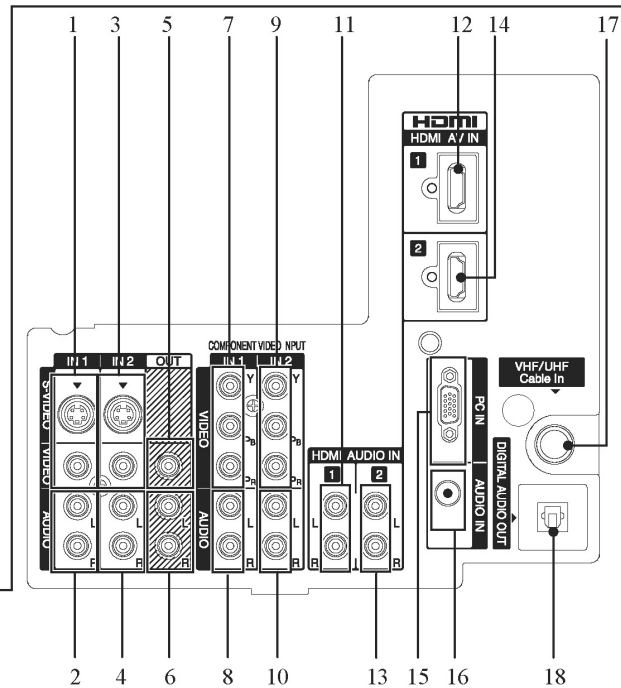
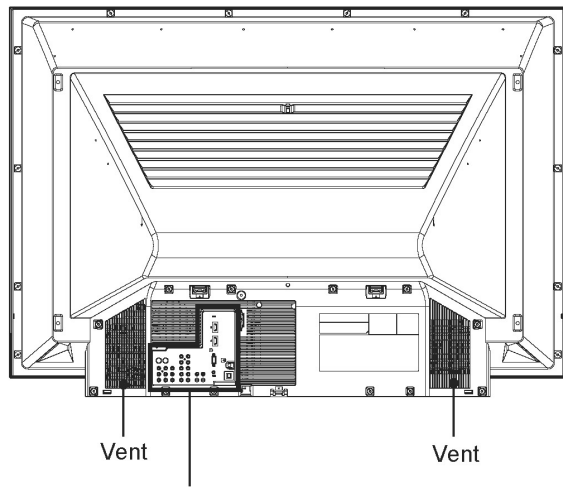


1	SD CARD Slot	Insert SD Card.
2	S-Video Input Connector 3	Connect from other component. (Video 3)
3	Video Input Connector 3	Connect from other component. (Video 3)
4	Audio Input Connector 3	Connect from other component. (Video 3)
5	MENU*	Press to display Main Menu.

6	OK*	Press to select menu and sub-menu items.
7	TV/VIDEO*	Changes Input source.
8	VOL +/- / ◀▶*	Press to adjust TV sound and to navigate menus.
9	CH v▲ / ▼▲*	Press to change channels and to navigate menus.
10	Remote Control Sensor	Receives infrared signal from Remote Control.

* Buttons listed above operate the same as Remote Control buttons of the same name.

Rear View <Model PT-56LCX16 unit shown>



For models PT-52LCX66-K/PT-61LCX66-K/PT-56LCX16-K/

1	S-Video/Video Input Connector 1	Connect from other component. (Video 1)
2	Audio Input Connector 1	Connect from other component. (Video 1)
3	S-Video/Video Input Connector 2	Connect from other component. (Video 2)
4	Audio Input Connector 2	Connect from other component. (Video 2)
5	Video Out Connector	Output video signal.
6	Audio Out Connector	Output audio signal. (Analog)
7	Component Video Input Connector 1	Connect from other component. (Component 1)
8	Audio Input Connector 1	Connect from other component. (Component 1)
9	Component Video Input Connector 2	Connect from other component. (Component 2)

10	Audio Input Connector 2	Connect from other component. (Component 2)
11	HDMI Input Terminal 1	Audio 1 Connect from other component. (HDMI 1)
12		Audio/Video 1 Connect from other component. (HDMI 1)
13	HDMI Input Terminal 2*	Audio 2 Connect from other component. (HDMI 2)
14		Audio/Video 2 Connect from other component. (HDMI 2)
15	PC (RGB) Input Connector	Connect from PC. (PC)
16	Audio Input Connector	Connect from PC. (PC)
17	VHF/UHF Cable In	Input terminal for an antenna or cable box signal.
18	DIGITAL AUDIO OUT	Output audio signal (Digital)

* For models PT-52LCX16/PT-56LCX16

* For models PT-52LCX66-K/PT-61LCX66-K/PT-56LCX16-K

Notes:

- Make sure the vents are not blocked. (This could cause damage.)
- Indication on the back panel may change without notice.

5.2. Replacement of Lamp

Lamp Replacement - For models PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-61LCX16

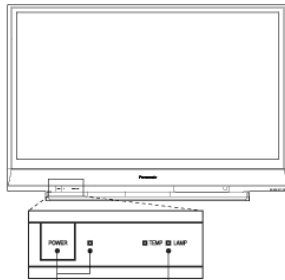
CAUTION:

Because of the possibility of injury, strictly follow the replacement procedure below.

This product has a High Intensity Discharge (HID) lamp that contains a small amount of mercury. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: <<http://www.eiae.org>>

Lamp replacement procedure

- 1 Turn power off, wait until power indicator stops blinking red, then unplug the power cord from the wall outlet and confirm that the area around the lamp unit has cooled down.



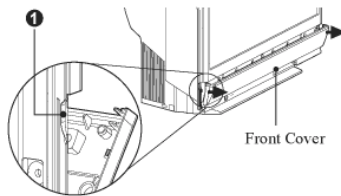
POWER button /POWER indicator LAMP indicator

Please wait more than one hour for lamp replacement.
[If you need to replace the lamp more urgently]
 • The projection display has a forced cooling feature. After the POWER button is turned OFF, and during the first minute of the normal cooling fan operation, press the VOL+ button on the projection display and 0 button on the remote control at same time for more than 5 seconds. The cooling fan operates for about 10 minutes. The LAMP indicator flashes red 5 times every 5 seconds.

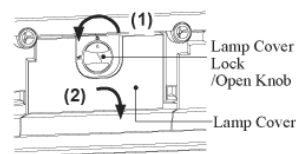
Note:

Remove Front Cover after Front Door is opened.

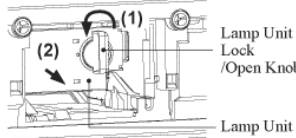
- 2 Pull on both ends of the Front Cover ① with your fingertips to remove it.



- 3 (1) Turn the Lamp Cover Lock/Open Knob to the left.
 (2) Pull the Lamp Cover out and down to open it.



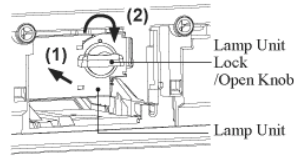
- 4 (1) Turn the Lamp Unit Lock/Open Knob to the left.
 (2) Grasp the Lamp Unit Lock/Open Knob and slowly remove the Lamp Unit as shown.


CAUTION

- The lamp unit is hot right after use and may cause burns if touched.
- Please allow the lamp unit to cool before handling or replacing it.

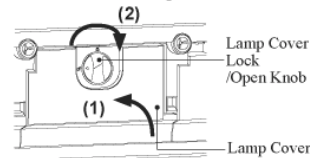
- 5 (1) Insert the new Lamp Unit being careful of the insertion direction.
 • Press on the arrow mark to confirm proper insertion.

- (2) Turn the Lamp Unit Lock/Open Knob to the right until it clicks.

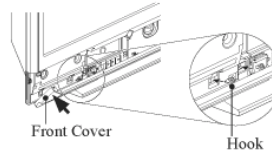


- Properly dispose of the old lamp. Please see the operating instructions for the projection display.
- Secure the lamp unit and lamp unit housing door. If they are not secured, a protective circuit will not allow the lamp to turn on.
- At this point, confirm that the lamp unit will not come out by pulling on the Lock/Open Knob.

- 6 (1) Close the Lamp Cover.
 (2) Turn the Lamp Cover Lock/Open Knob to the right.



- 7 Be sure that the Hook on the Front Cover is securely fastened to the unit as shown.



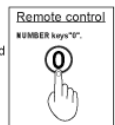
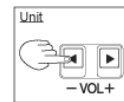
After lamp replacement, follow the procedure below

Warning:

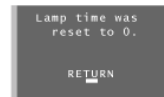
Perform lamp time reset only when the lamp has been replaced.

Lamp time reset procedure

- 1 Be sure the power cord is plugged into a properly grounded wall outlet. Then, press the POWER button on the projection display or the remote control to turn the unit on.
- 2 While pressing the VOL- button on the projection display, hold down the 0 button on the remote control at same time for more than 5 seconds.



- 3 When reset procedure is complete, the following screen will appear.



- This screen may be different from the actual screen.

When lamp time reset is finished, the LAMP indicator goes out.

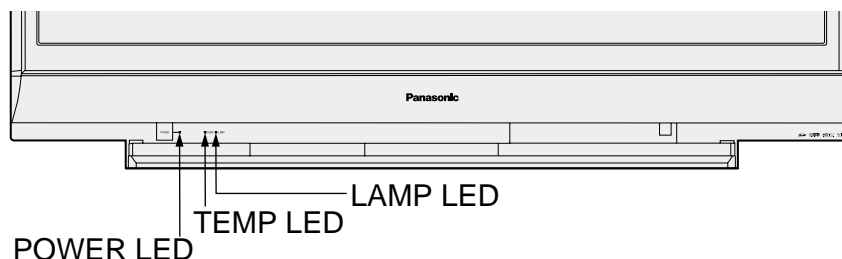
Printed in Japan
LSQC0459 A

6 Service Mode

LED INDICATIONS FOR ERROR CONDITIONS

Each LED indication facilitates finding the cause of an error.

When an error is detected, the Lamp goes off and the LEDs on the front flash.



Error No.	Error Information	(Note 4)			(Note 1, 2)	(Note 3)	RESET
		POWER LED flashes orange	TEMP LED flashes red	LAMP LED flashes red	SOS	LAMP OFF	
1)	SOS2 (Over voltage/current)	1	-	-	H10SOS2	○	Power ON/OFF
2)	Fan 1, Fan 2 or Fan 3 stops	2	-	-	H20FANST	○	AC ON/OFF
3)	Abnormal voltage (DT+5V line)	3	-	-	H30DT9V	○	Power ON/OFF
4)	IC5001 (GC4Pro) communication error	5	-	-	H50GC4PR	○	AC ON/OFF
5)	Temperature Sensor shorted or open (Thermistor 2 P.C.B.)	-	2	-	-	○	Power ON/OFF
6)	Abnormal temperature (Thermistor 2 P.C.B.)	-	3	-	-	○	
7)	Clogged Air Filter	-	6	-	-	○	Clean Air Filter
8)	Abnormal Lamp	-	-	1	-	○	Power ON/OFF
9)	Iris Mechanism hardware error	-	-	2	-	-	
10)	Iris calibration error	-	-	3	-	-	
11)	Lamp Cover open	7	-	-	(H70LAMCV)	○	
12)	Abnormal voltage (+17V, +9V, +5V line) for LCD Drive P.C.B.	8	-	-	(H80LCDDV)	○	

Note:

1. The detected SOS Error 1) 2) 3) 4) 11) 12) data will be stored in the EEPROM.

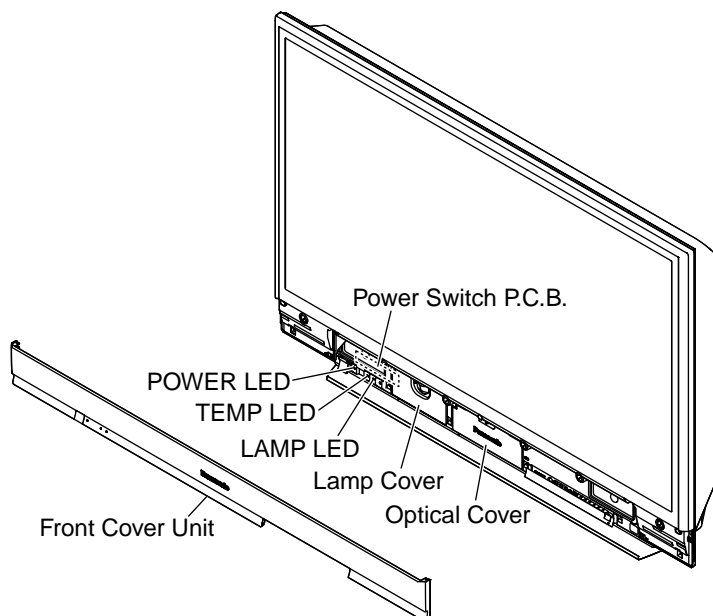
2. SOS (Error) information is displayed in Service Mode (4/4).

3. LAMP OFF: The LED will flash immediately after the Lamp goes off.

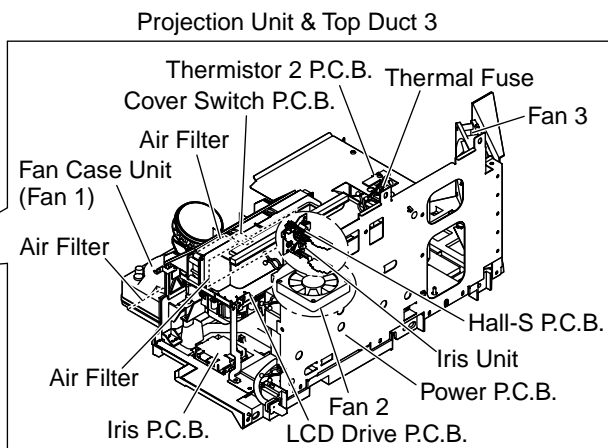
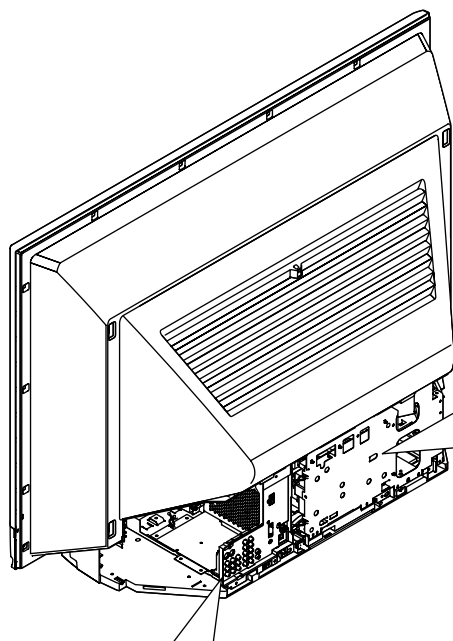
4. In case of Error 9) or 10), the unit will not shut off and Dynamic Iris setting in Adv. adjust of Picture Menu will be changed to "OFF" automatically. When the unit is turned off and turned back on, Dynamic Iris "OFF" setting remains. Lamp LED will not flash as long as Dynamic Iris setting in Adv. adjust of Picture Menu is set to "ON" manually.

MAIN PARTS LOCATION

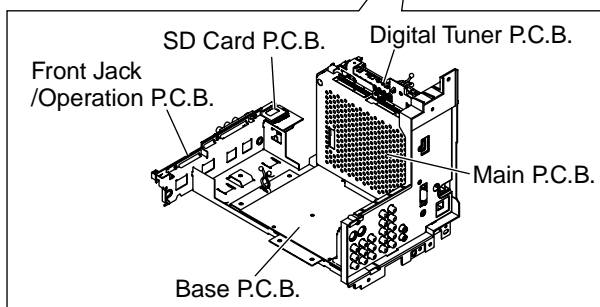
<Front View>



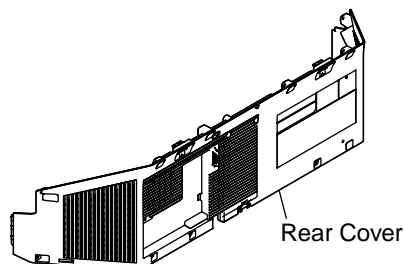
<Rear View>



Note: There is not the Thermistor 1 P.C.B. in this unit.



TV Unit & Digital Tuner P.C.B.



SERVICE MODE

In this mode, the following information can be confirmed on the screen:

Service Mode (1/4)

- Current Lamp elapsed time
- The number of times the Lamp has turned on (**For reference only**)
- BKS_V number read-out

Service Mode (2/4)

- Key detection check
- Communication check for IIC bus on the Main P.C.B.
- Total Lamp elapsed time (**For reference only**)
- Communication check for IIC bus on the Main P.C.B.
- EEPROM IC6000 version and build version (**For reference only**)
- IC6001 software version and build version (**For reference only**)

Service Mode (3/4)

- IC6001 Port information

Note:

IC6001: Main Microcontroller on the Main P.C.B.

Service Mode (4/4)

- SOS (Error) information

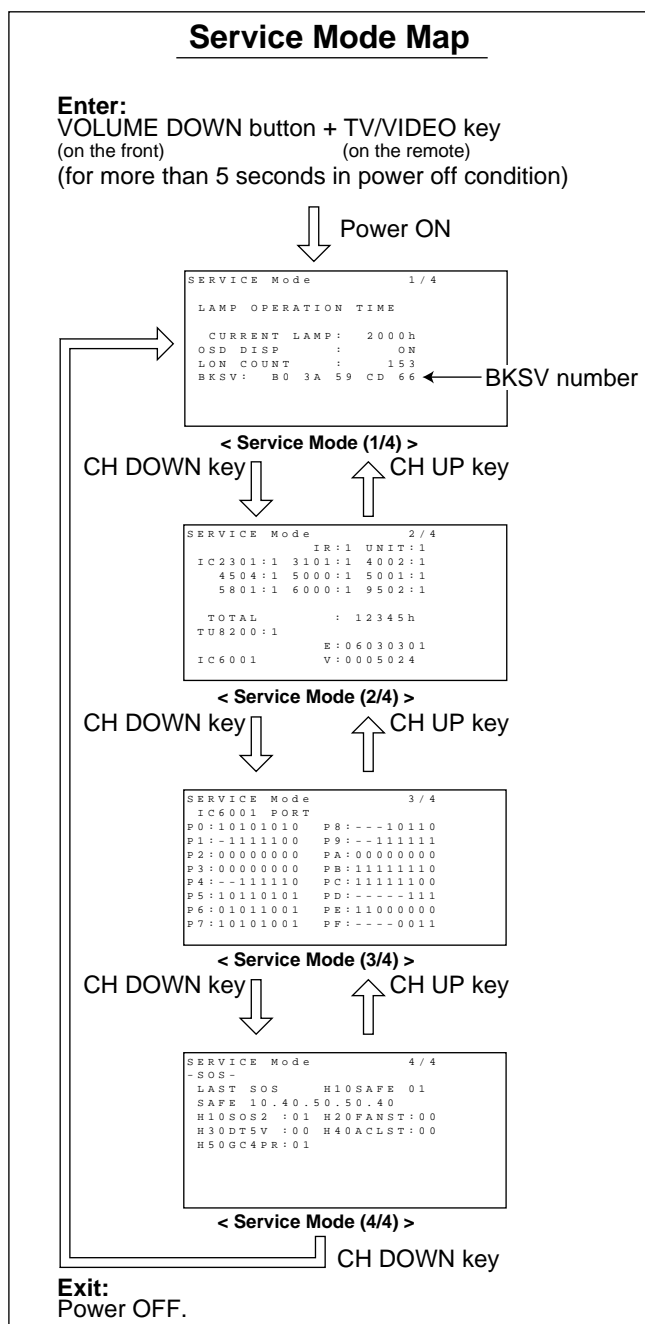


Fig. 1-1

- To enter Service Mode, press and hold the VOLUME DOWN button on the unit and the TV/VIDEO key on the remote for more than 5 seconds in power off condition. Service Mode (1/4) will appear.

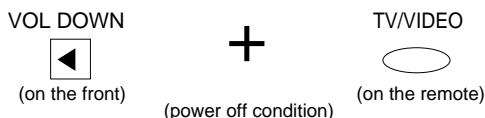


Fig. 1-2

SERVICE Mode		1 / 4
LAMP OPERATION TIME		
CURRENT LAMP :	2000h	*1 (Changeable)
OSD DISP :	ON	*2
LON COUNT :	153	*3
BKSV: B0 3A 59 CD 66		*4

<Service Mode (1/4)>

Fig. 1-3

- *1: The current elapsed "Lamp operation" time (in hours) (changeable)

Note:

"CURRENT LAMP" can be changed as follows:
Select "CURRENT LAMP" by pressing CH UP/DOWN key and press the OK key.

Then, press the VOLUME UP/DOWN key to change the value of *1.

To release, press the RECALL key.

- *2: OSD Display ON/OFF mode (**Not used for service**)

Note:

Press the OK key to display OFF.

To release, press any key.

- *3: The number of times the Lamp has turned on (limit 65535) (**For reference only**)
(When the Lamp time is reset, value of *3 will be "0")

- *4: BKSV number read-out
HDMI IC on the Main P.C.B. has its own number called BKSV and it is displayed.

- Press the CH DOWN key. Service Mode (2/4) will appear.

SERVICE Mode		2 / 4
IR: 1	UNIT: 1	*5
IC 2301: 1	3101: 1	4002: 1
4504: 1	5000: 1	5001: 1
5801: 1	6000: 1	9502: 1
TOTAL :	1 2 3 4 5 h	*7 (Changeable)
TU 8200: 1		*8
	E: 06030301	*9
IC 6001	V: 0005024	*10

<Service Mode (2/4)>

Fig. 1-4-1

- *5: Key detection (IR and Unit operation button) check

Note:

On the remote, first, press the TV key on the remote to go to TV mode. Then, press any operation key except POWER, FF, PAUSE, STOP, REC, VCR/DBS CH UP/DOWN to detect if a key has been pressed. If a key has been detected by IC6001, "1" will change to "0."

On the unit, press any operation button except POWER to detect if a button has been pressed.

If a button has been detected by IC6001, "1" will change to "0."

- *6: Communication check for I²C bus on the Main P.C.B.

(Communication check for I ² C bus)		
Explanation		Code No.
Communication check for I ² C bus (IC6001 ↔ IC2301 (LCD MICROCONTROLLER))	NG OK	0 1
Communication check for I ² C bus (IC6001 ↔ IC3101 (VIDEO SW))	NG OK	0 1
Communication check for I ² C bus (IC6001 ↔ IC4002 (AUDIO SW))	NG OK	0 1
Communication check for I ² C bus (IC6001 ↔ IC4504 (AUDIO AMP))	NG OK	0 1
Communication check for I ² C bus (IC6001 ↔ IC5000 (MAIN VIDEO SIGNAL PROCESS))	NG OK	0 1
Communication check for I ² C bus (IC6001 ↔ IC5001 (DIGITAL VIDEO SIGNAL PROCESS))	NG OK	0 1
Communication check for I ² C bus (IC6001 ↔ IC5801 (HDMI INTERFACE))	NG OK	0 1
Communication check for I ² C bus (IC6001 ↔ IC6000 (EEPROM))	NG OK	0 1
Communication check for I ² C bus (IC6001 ↔ IC9502 (IRIS MICROCONTROLLER))	NG OK	0 1

Fig. 1-4-2

*7: The total elapsed "Lamp operation" time (in hours)
(changeable) (For reference only)

Note:

Changing the value of *1, does not affect the value of *7.

*8: Communication check for IIC bus on the Main P.C.B.

(Communication check for I ² C bus)	
<div style="text-align: center;"> IC6001 ↔ TUNER ↓ T U 8 2 0 0 : 1 </div>	
Explanation	Code No.
Communication check for I ² C bus (IC6001 ↔ TUNER(ATSC DIGITAL TUNER)) NG OK	0 1

Fig. 1-4-3

*9: EEPROM IC6000 version and build version

*10: IC6001 software version and build version

3. Press the CH DOWN key. Service Mode (3/4) will appear.

SERVICE Mode 3 / 4	
IC6001 PORT	
P0: 1 0 1 0 1 0 1 0	P8: - - - 1 0 1 1 0
P1: - 1 1 1 1 1 0 0	P9: - - 1 1 1 1 1 1
P2: 0 0 0 0 0 0 0 0	PA: 0 0 0 0 0 0 0 0
P3: 0 0 0 0 0 0 0 0	PB: 1 1 1 1 1 1 1 0
P4: - - 1 1 1 1 1 0	PC: 1 1 1 1 1 1 0 0
P5: 1 0 1 1 0 1 0 1	PD: - - - - 1 1 1
P6: 0 1 0 1 1 0 0 1	PE: 1 1 0 0 0 0 0 0
P7: 1 0 1 0 1 0 0 1	PF: - - - - 0 0 1 1

<Service Mode (3/4)>

Fig. 1-5

IC6001
Port
information
(1: Hi
0: Low
-: Not used)

4. Press the CH DOWN key. Service Mode (4/4) will appear.

SERVICE Mode 4 / 4	
- SOS -	
LAST SOS	H10SAFE 01 ← *11
SAFE 10.40.50.50.40	← *12
H10SOS2: 01	H20FANST: 00 ← *13
H30DT5V: 00	H40ACLST: 00
H50GC4PR: 01	ignore

<Service Mode (4/4)>

Fig. 1-6-1

*11 Latest SOS (Error) number and the number of times
POWER LED flashed

(Latest SOS number and the number of times
POWER LED flashed)

LAST SOS	H10SAFE 01
----------	------------

latest SOS (Error)
number
(H10~H50, H70, H80)

number of times
POWER LED flashed
(01~03, 05, 07, 08)

*12 SOS (Error) number records

(SOS number records)

SAFE 10.40.50.50.40

latest number
previous number
the number before previous
the 1st number after shipment
the 2nd number after shipment

*13 The number of times each SOS (Error) has occurred
in hexadecimal

For *11~*13: SOS (Error) information, refer to "LED
INDICATIONS FOR ERROR CONDITIONS."

Note:

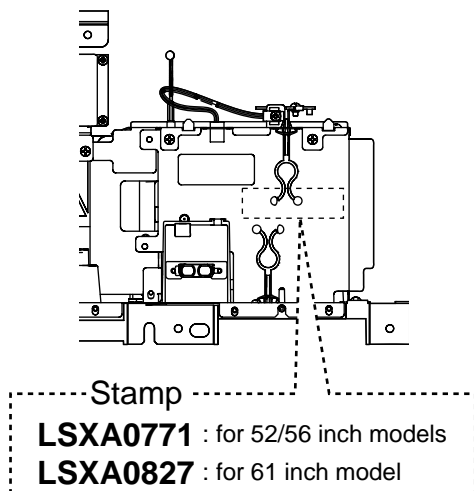
To release from any service mode, press the POWER
button to turn off.

TO DISTINGUISH THE PROJECTION UNIT

The only difference between the 52/56 inch model and 61 inch model of the Projection Unit is the LCD Drive P.C.B. Therefore, see the stamp on the Lamp Wall to differentiate. Also, the Focus Adjustment should be performed to match each size of model after replacing the new Projection Unit or the new Base Body Unit.

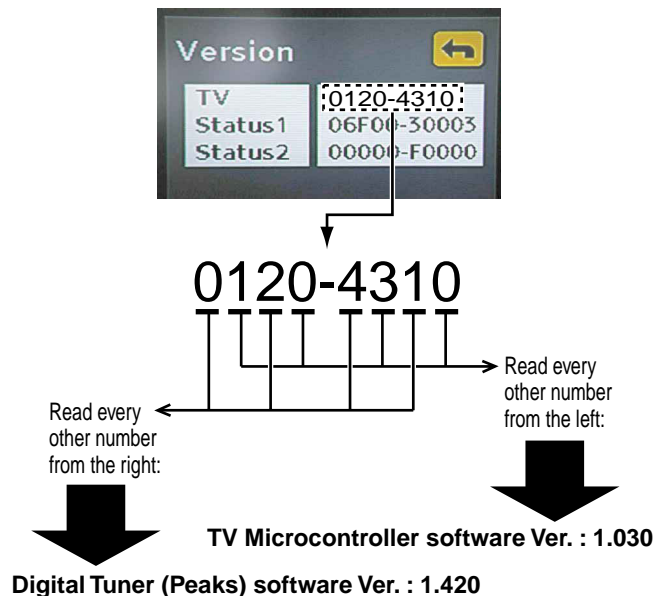
Note:

The Base Body Unit includes the Projection Unit.



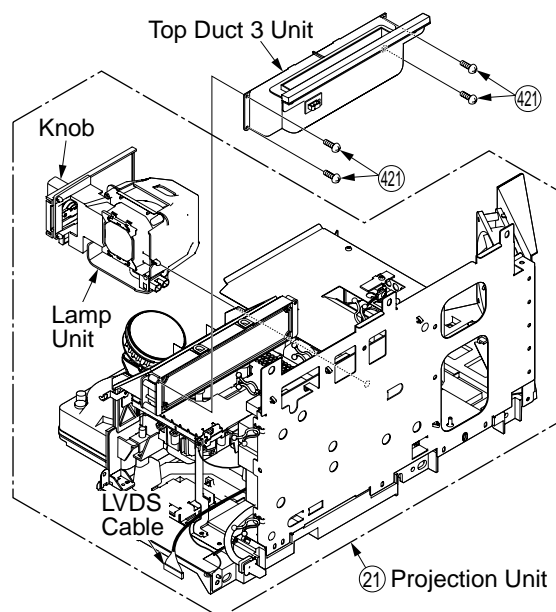
TO READ THE DIGITAL TUNER (PEAKS) SOFTWARE VERSION AND TV MICROCONTROLLER SOFTWARE VERSION

1. Press MENU key with the power on.
2. Press CH UP/DOWN key and select "Setup." Then press OK key.
3. Press CH UP/DOWN key and select "About." Then press OK key.
4. Select "Version" and press OK key. Version menu will appear as shown below. Starting with the second digit from the right or from the left.



BEFORE REMOVING THE PROJECTION UNIT FROM THE UNIT AT THE USER'S LOCATION

When removing the Projection Unit, remove the Lamp Unit and the Top Duct 3 Unit from the Projection Unit and keep them. Then, reinstall this Lamp Unit and the Top Duct 3 Unit into the new Projection Unit.



RESET USER'S MEMORY FUNCTIONS

Be sure to reset the user's memory:

- After replacing the Digital Tuner P.C.B.
- If the secret code for V-chip has been forgotten.
- When moving the unit to a new location.
- When resetting SOS (Error) number records.

1. Turn on the power.
2. Press and hold the VOLUME DOWN button on the unit and the OK key on the remote for more than 3 seconds. When reset is finished, power shuts off automatically (the user's memory is reset).

CLOGGED AIR FILTER DETECTION

When a dirty or clogged air filter is detected, the OSD display appears for 1 minute. And then the Lamp is turned OFF.

When this OSD display appears, remove the Projection Unit from rear, and clean the air filters gently on the Projection Unit.

**AIR FILTER CLEANING
IS RECOMMENDED AT THIS
TIME. FIRST TURN THE
UNIT OFF.
PLEASE CALL FOR
SERVICE.**

**UNIT WILL BE TURNED
OFF AFTER 1 MINUTE.**

DO NOT UNPLUG AC CORD DURING COOLING OPERATION

The lamp cooling fan will continue to operate for approximately 1 minute after the power is turned off.

At the same time, the POWER LED will flash red.

Do not disconnect the AC Cord from the power outlet and do not open any circuit breakers while the cooling fan is still operating.

HOT CIRCUIT

Primary circuit exists on the Power P.C.B.

This circuit is identified as "**HOT**" on the P.C.B. and in the Service Manual. Use extreme care to prevent accidental shock when servicing.

MODEL NO. IDENTIFICATION MARK

Use Marks shown in the chart below to distinguish the different models included in this Service Manual.

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
NOT USED	PT

Note:

Refer to Item 3 of Schematic Diagram Notes of Schematic Diagram and Circuit Board Layout Notes, for mark "PT."

BEFORE REMOVING THE MAIN P.C.B. OR THE TV UNIT FROM THE UNIT AT THE USER'S LOCATION

Note:

The TV Unit includes the Main P.C.B.

CAUTION:

1. **Be sure to make a note of the CURRENT LAMP value (value A) in Service Mode (1/4):**

SERVICE Mode	1 / 4
LAMP OPERATION TIME	
CURRENT LAMP :	2000h ← Value A (Changeable)
OSD DISP :	ON
LON COUNT :	153
BKSV :	4B 7E 3D CA FB

<Service Mode (1/4)>

Fig. 2

LAMP OPERATION TIME is stored in EEPROM on the Main P.C.B. Therefore, before removing the Main P.C.B. or the TV Unit at the user's location, make a note of the CURRENT LAMP value (value A) in Service Mode (1/4). Then, after installing the new Main P.C.B. or the TV Unit at the user's location, set the CURRENT LAMP value to the original value (value A) in Service Mode. Otherwise, OSD and LED Lamp replacement indications will be displayed at the wrong time.

Note:

In case it is impossible to make a note of the **CURRENT LAMP value** because of a defective Main P.C.B., ask the customer their daily average use and the approximate age of the current Lamp. Then, calculate the CURRENT LAMP value as follows and make a note.

Daily average use (hours)	×	Approx. age (days)	=	CURRENT LAMP (hours)
------------------------------	---	-----------------------	---	-------------------------

Note:

The TOTAL value can be set to the original value in Service Mode (2/4) by similar method:
Before removing the Main P.C.B. at the user's location, make a note of the TOTAL value in Service Mode (2/4). Then, after installing the new Main P.C.B. at the user's location, set the TOTAL value to the original value in Service Mode.

WHEN REINSTALLING THE MAIN P.C.B. OR THE TV UNIT FROM THE UNIT AT THE USER'S LOCATION

CAUTION:

1. Set CURRENT LAMP value to original value as follows.
 - 1) Select CURRENT LAMP in Service Mode (1/4).
 - 2) Press the VOLUME UP/DOWN key on the remote to change to the original value (value A) that was noted before removing the Main P.C.B. or the TV Unit at the user's location.

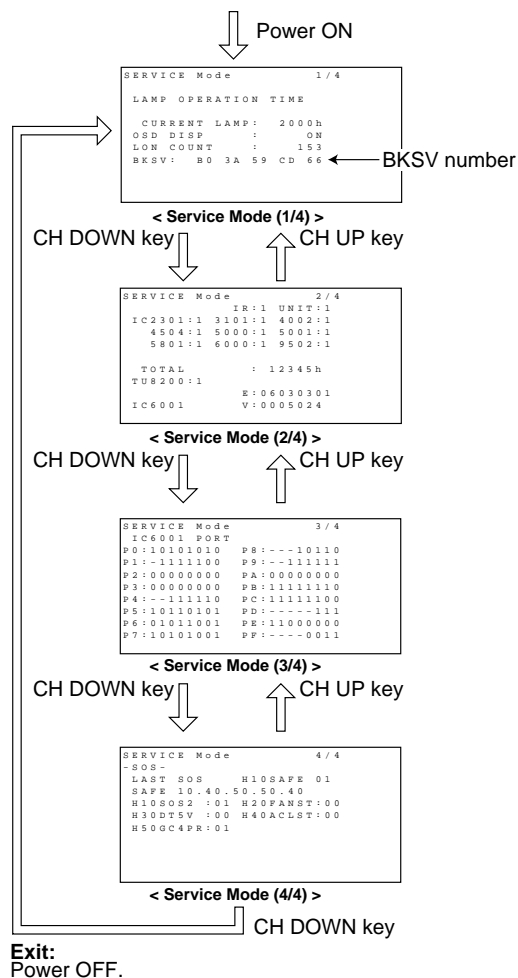
SERVICE Mode	1 / 4
LAMP OPERATION TIME	
CURRENT LAMP :	2000h ← Value A (Changeable)
OSD DISP :	ON
LON COUNT :	153
BKSV :	48 BF 9D 72 B5

<Service Mode (1/4)>

Fig. 3

Service Mode Map

Enter:
VOLUME DOWN button + TV/VIDEO key
(on the front) (on the remote)
(for more than 5 seconds in power off condition)



WIRE AND LEAD POSITION DIAGRAM OF THE UNIT

After servicing, make sure that all wires, leads, and claspers are placed in their original position. It is important for the best operation of the unit.

Note: Use extreme care especially for the following.

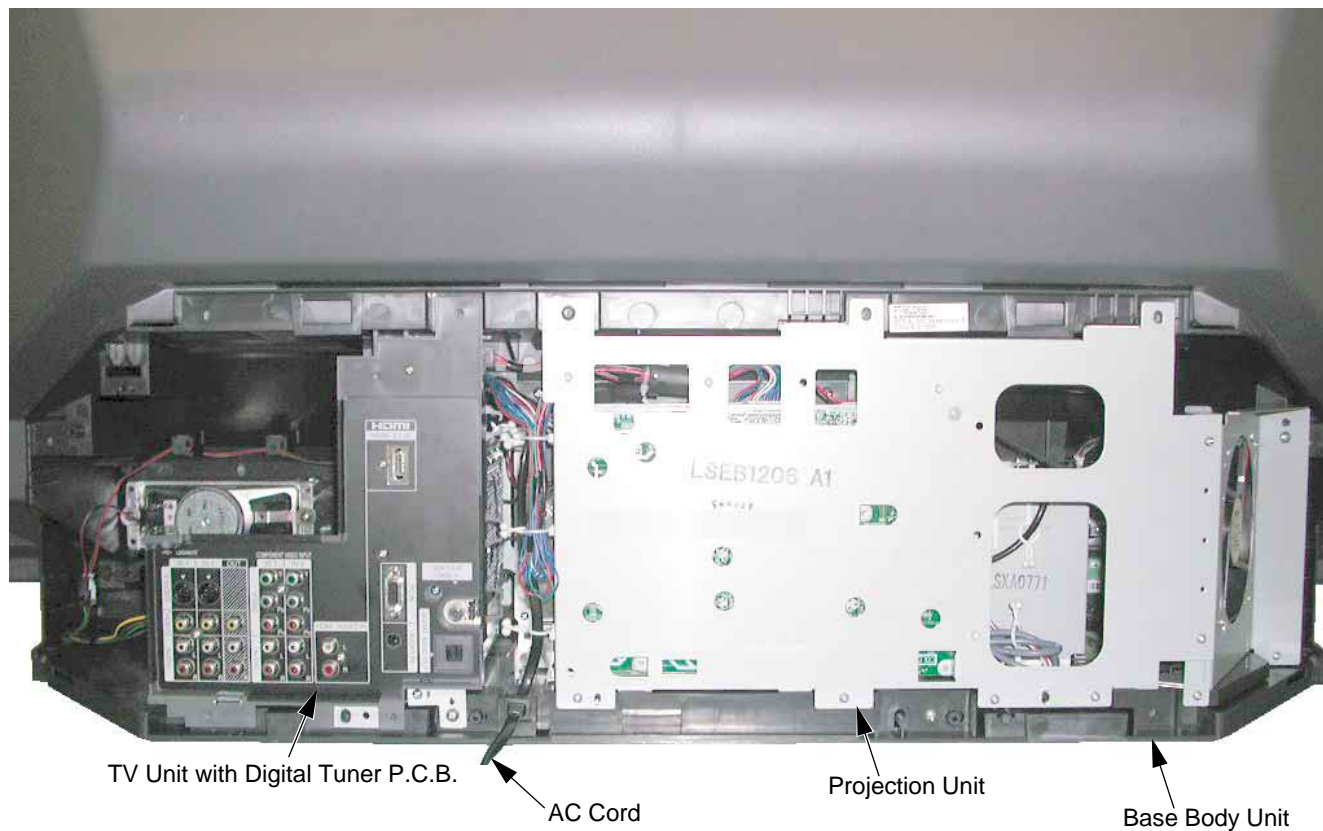


Fig. 9-1

After servicing, make sure that all wires, leads, and clampers are placed in their original position. It is important for the best operation of the unit.

Note: Use extreme care especially for the following.

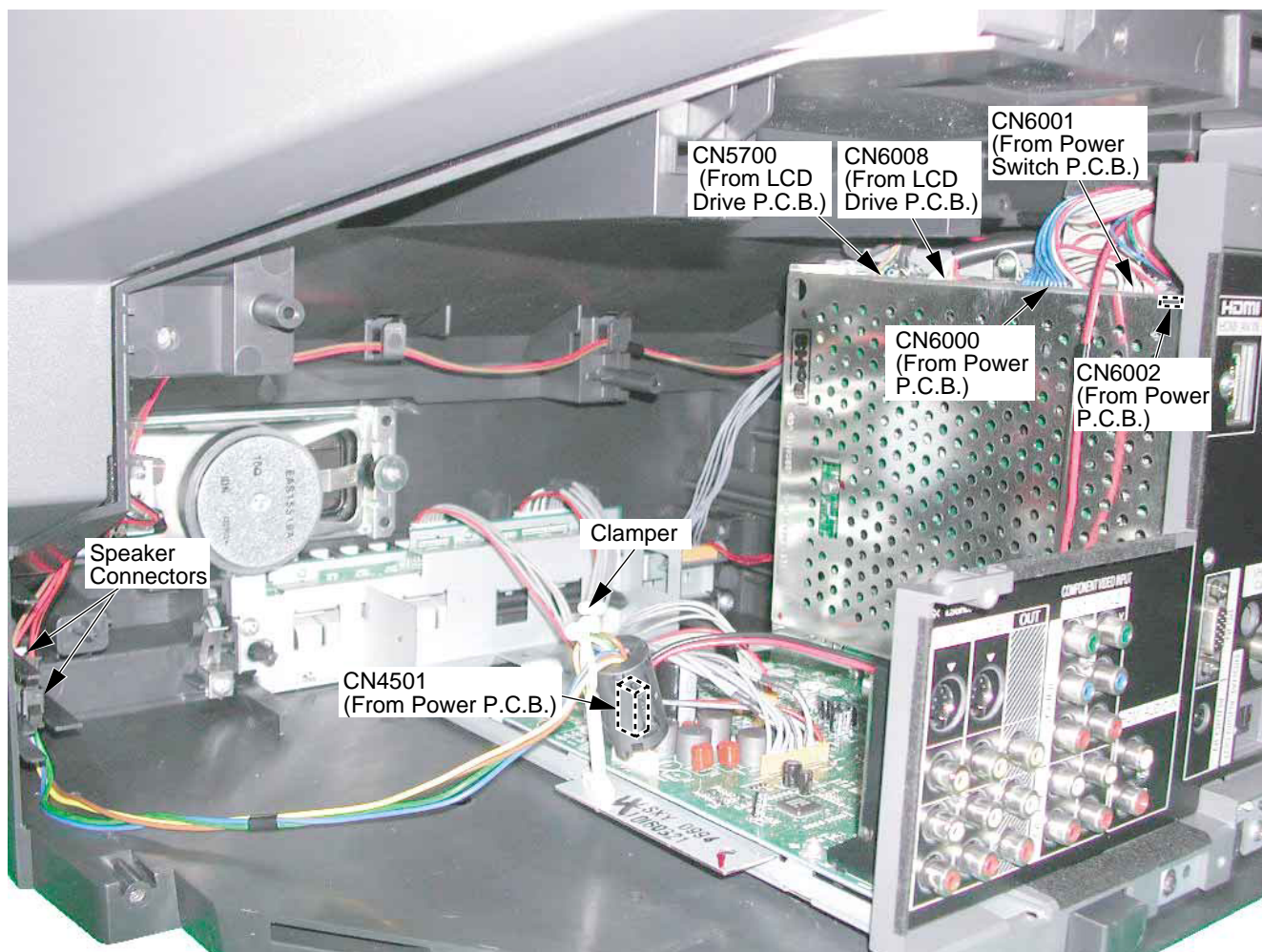


Fig. 9-2

After servicing, make sure that all wires, leads, and clampers are placed in their original position. It is important for the best operation of the unit.

Note: Use extreme care especially for the following.

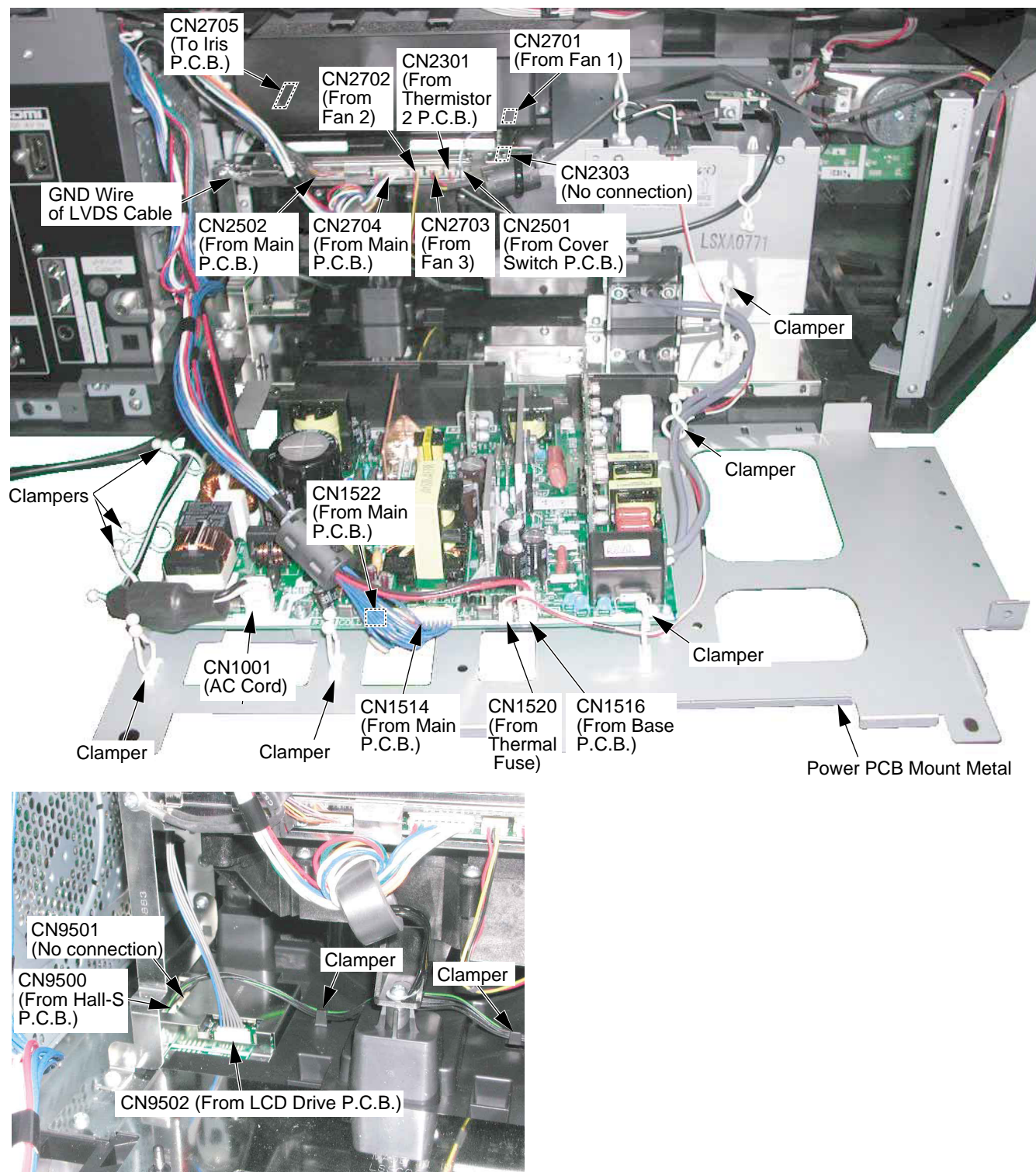


Fig. 9-3

After servicing, make sure that all wires, leads, and clampers are placed in their original position. It is important for the best operation of the unit.

Note: Use extreme care especially for the following.

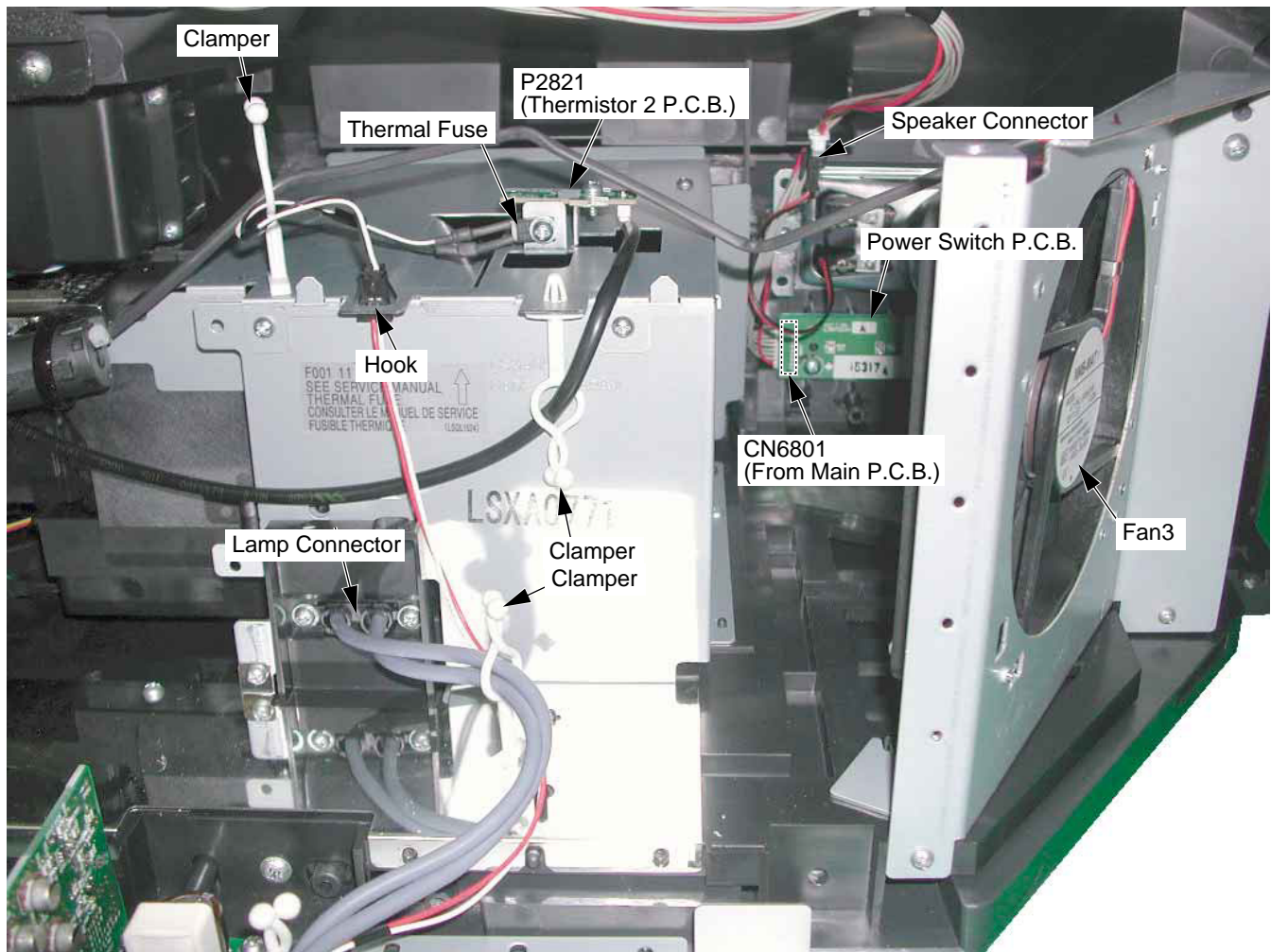


Fig. 9-4

After servicing, make sure that all wires, leads, and clampers are placed in their original position. It is important for the best operation of the unit.

Note: Use extreme care especially for the following.

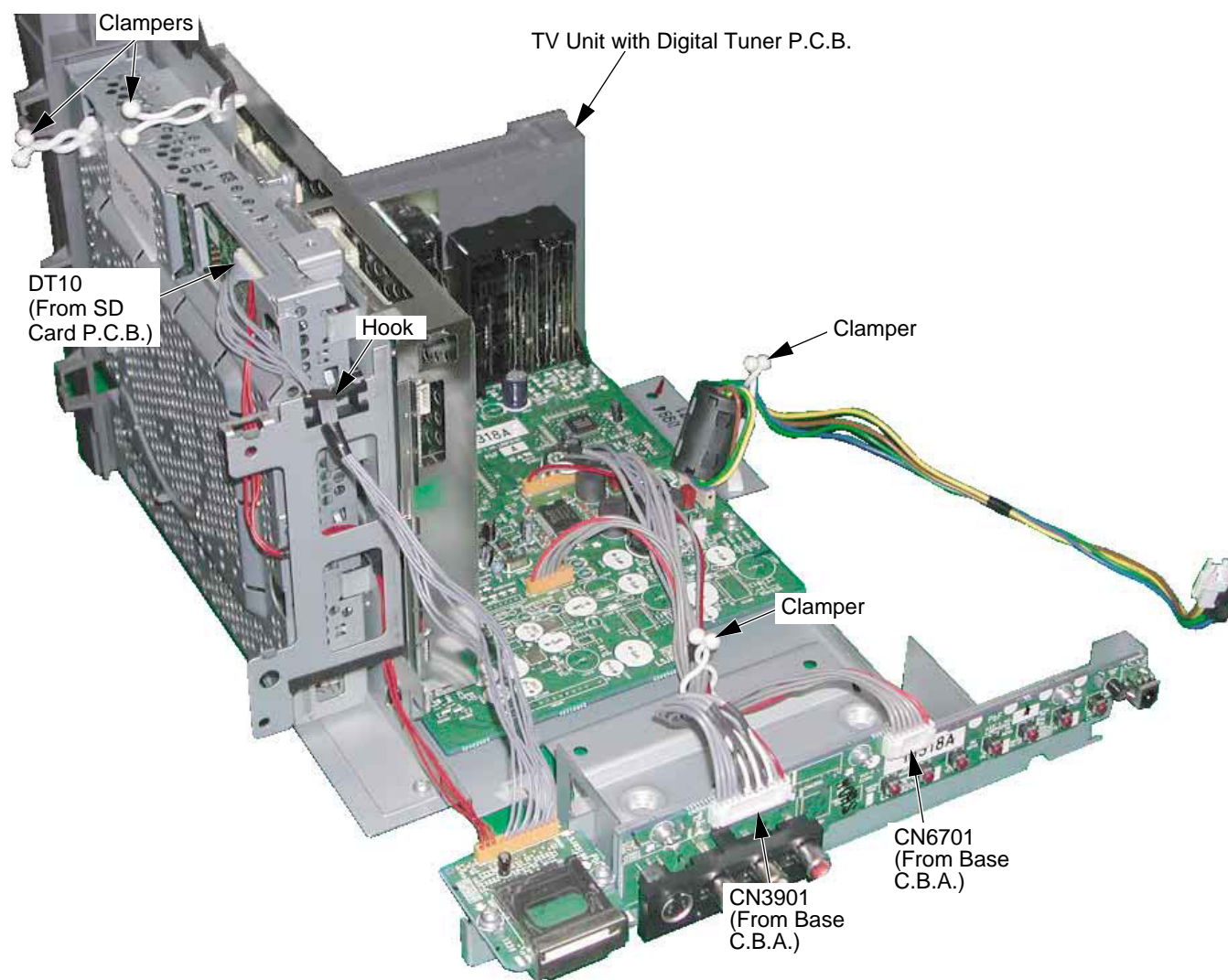


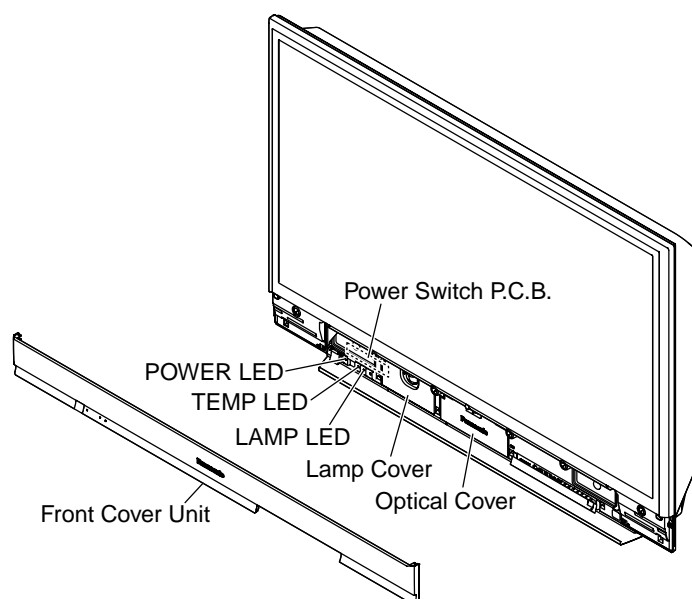
Fig. 9-5

7 Troubleshooting Guide

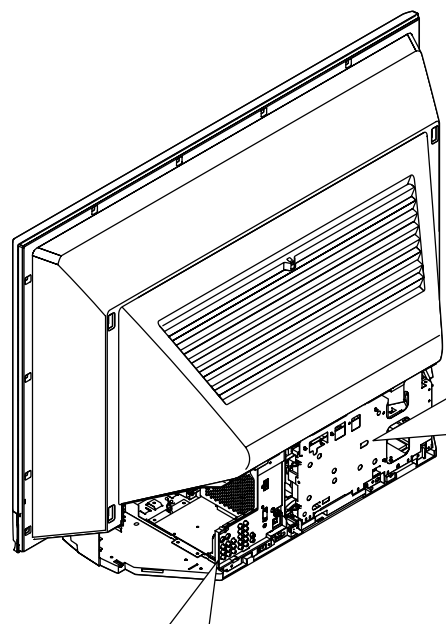
7.1. Troubleshooting Hints for Component Level Repair

MAIN PARTS LOCATION

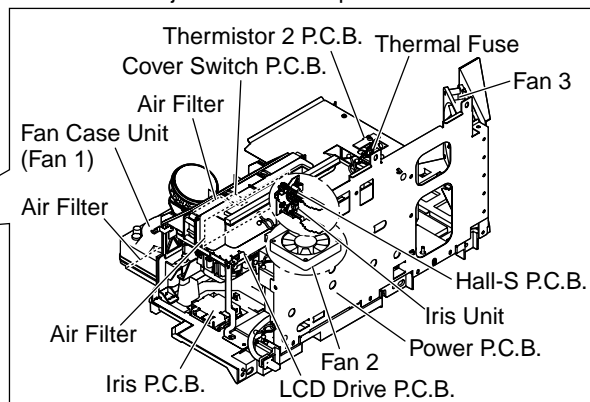
<Front View>



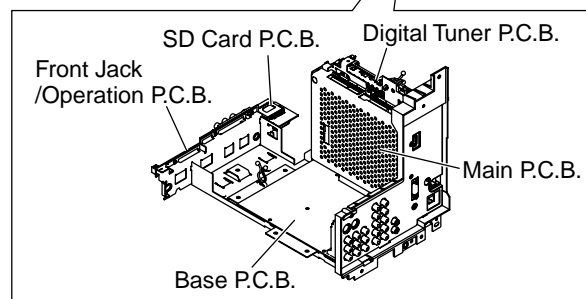
<Rear View>



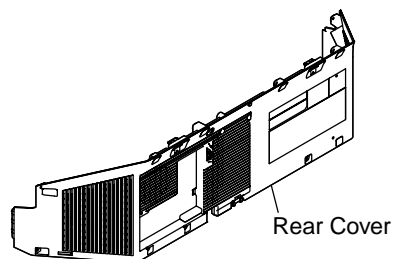
Projection Unit & Top Duct 3



Note: There is not the Thermistor 1 P.C.B. in this unit.



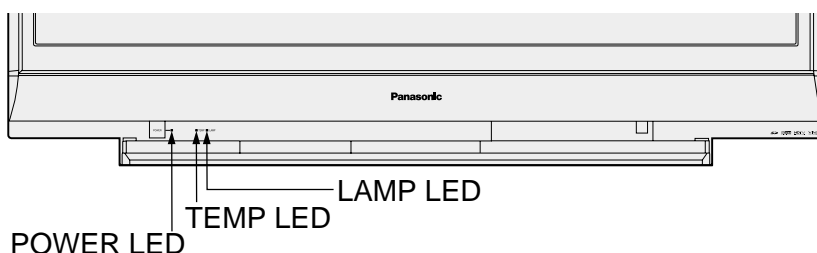
TV Unit & Digital Tuner P.C.B.



LED INDICATIONS FOR ERROR CONDITIONS

Each LED indication facilitates finding the cause of an error.

When an error is detected, the Lamp goes off and the LEDs on the front flash.



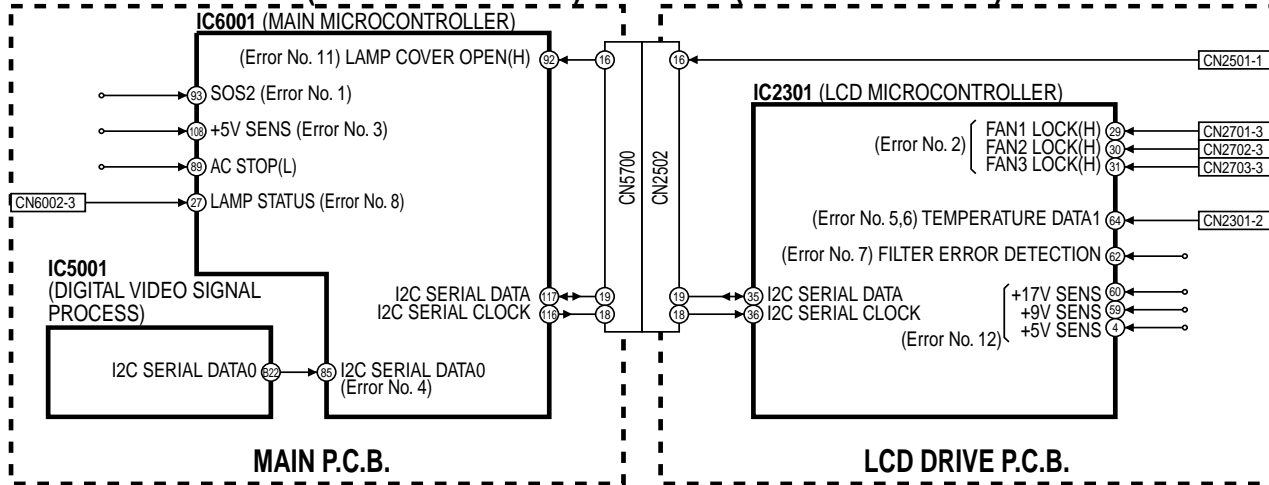
Error No.	Error Information	POWER LED flashes orange	TEMP LED flashes red	LAMP LED flashes red	(Note 4)	(Note 1, 2)	(Note 3)
					SOS	LAMP OFF	RESET
1)	SOS2 (Over voltage/current)	1	-	-	H10SOS2	○	Power ON/OFF
2)	Fan 1, Fan 2 or Fan 3 stops	2	-	-	H20FANST	○	AC ON/OFF
3)	Abnormal voltage (DT+5V line)	3	-	-	H30DT9V	○	Power ON/OFF
4)	IC5001 (GC4Pro) communication error	5	-	-	H50GC4PR	○	AC ON/OFF
5)	Temperature Sensor shorted or open (Thermistor 2 P.C.B.)	-	2	-	-	○	Power ON/OFF
6)	Abnormal temperature (Thermistor 2 P.C.B.)	-	3	-	-	○	
7)	Clogged Air Filter	-	6	-	-	○	Clean Air Filter
8)	Abnormal Lamp	-	-	1	-	○	Power ON/OFF
9)	Iris Mechanism hardware error	-	-	2	-	-	
10)	Iris calibration error	-	-	3	-	-	
11)	Lamp Cover open	7	-	-	(H70LAMCV)	○	
12)	Abnormal voltage (+17V, +9V, +5V line) for LCD Drive P.C.B.	8	-	-	(H80LCDDV)	○	

Note:

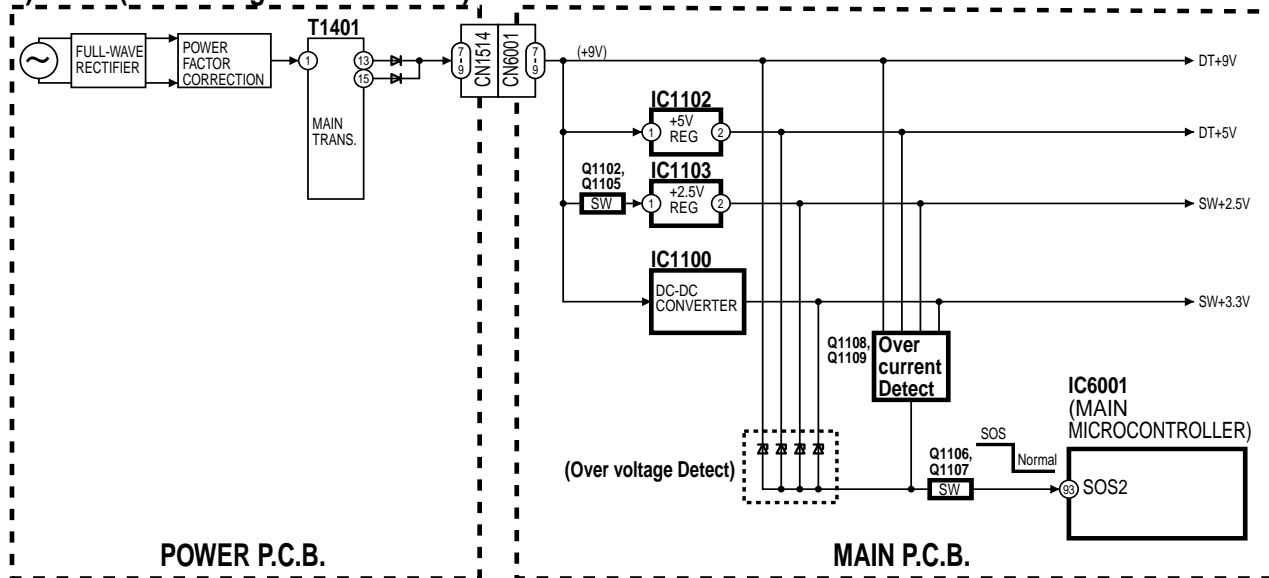
1. The detected SOS Error 1) 2) 3) 4) 11) 12) data will be stored in the EEPROM.
2. SOS (Error) information is displayed in Service Mode (4/4).
3. LAMP OFF: The LED will flash immediately after the Lamp goes off.
4. In case of Error 9) or 10), the unit will not shut off and Dynamic Iris setting in Adv. adjust of Picture Menu will be changed to "OFF" automatically. When the unit is turned off and turned back on, Dynamic Iris "OFF" setting remains. Lamp LED will not flash as long as Dynamic Iris setting in Adv. adjust of Picture Menu is set to "ON" manually.

Protection Circuit

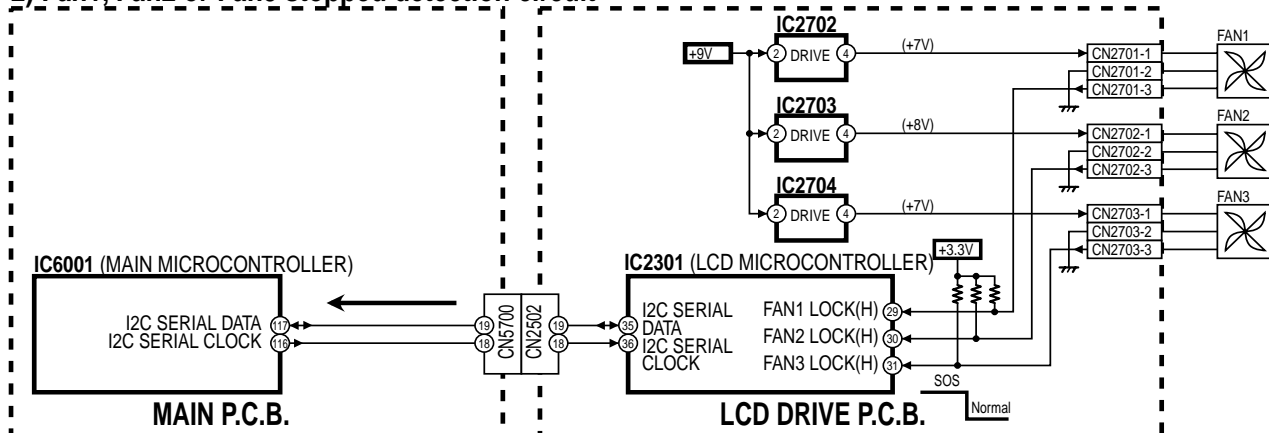
SOS terminal of IC6001 (Main microcontroller) and IC2301 (LCD Microcontroller)



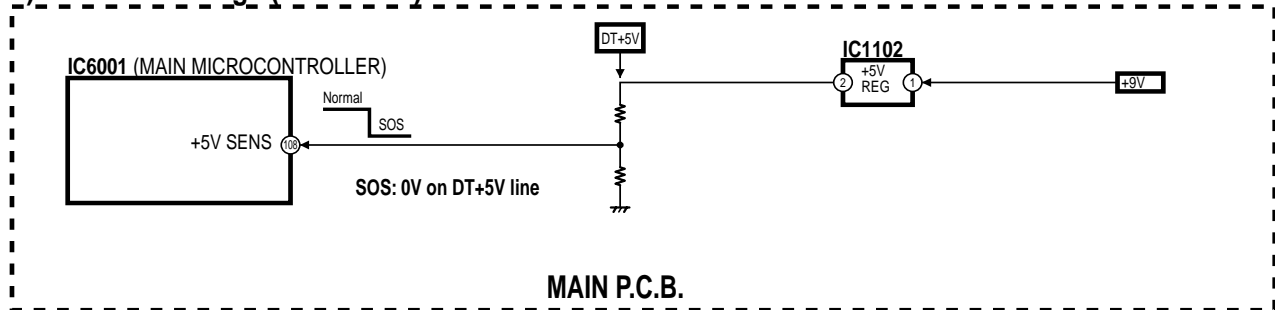
1) SOS2 (over voltage/current detect) detection circuit



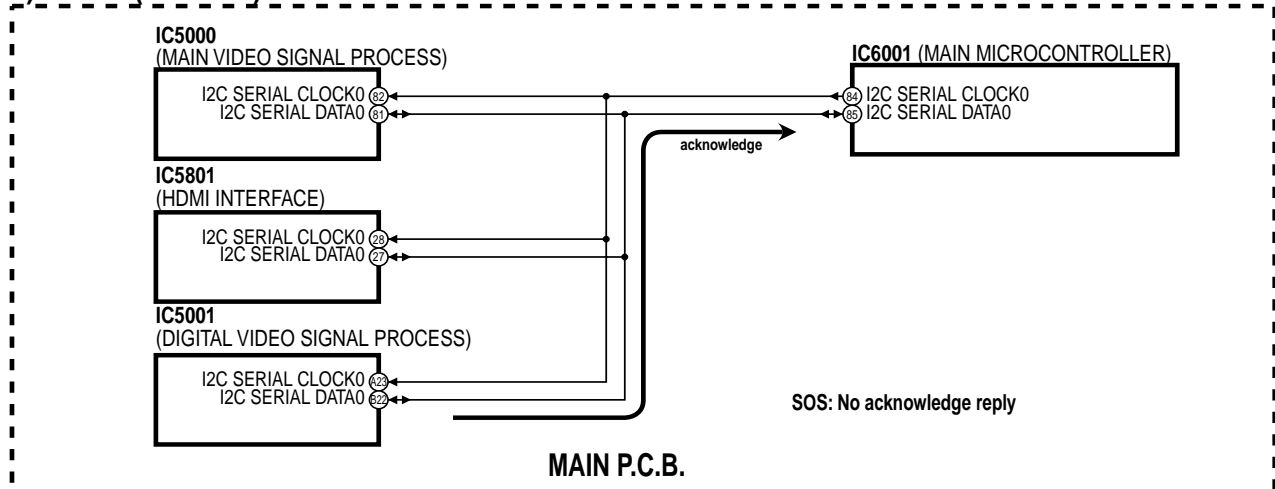
2) Fan1, Fan2 or Fan3 stopped detection circuit



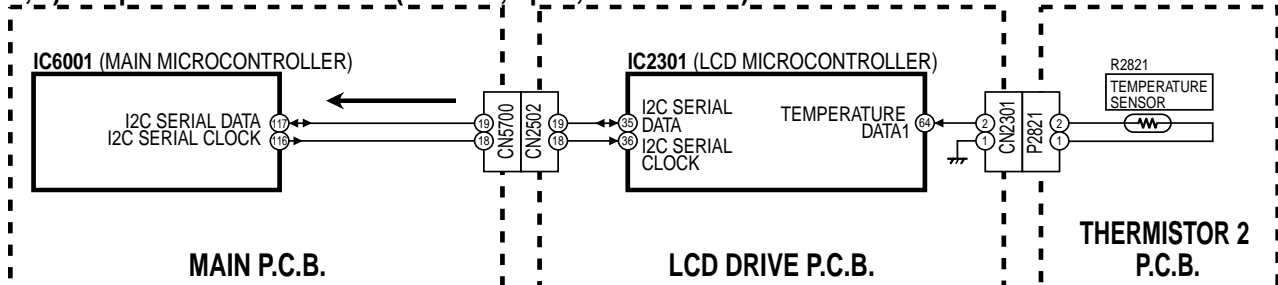
3) Abnormal voltage (DT+5V line) detection circuit



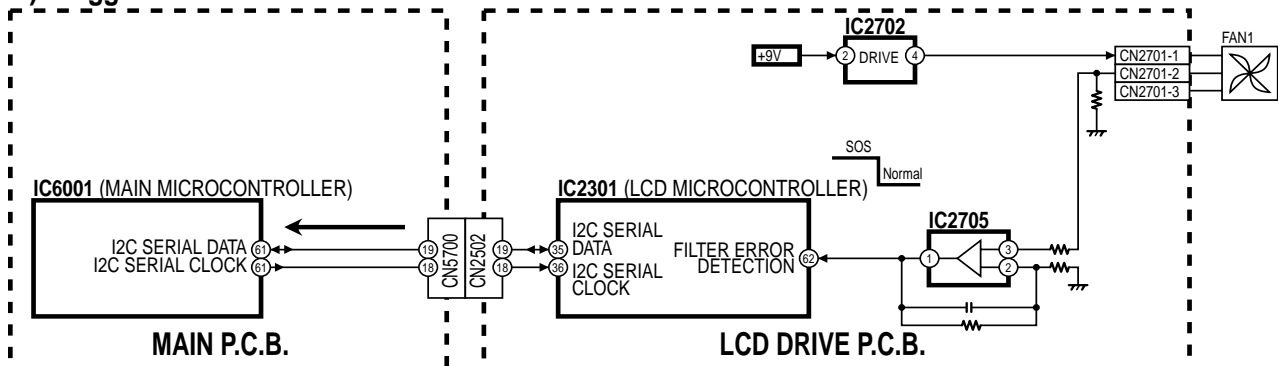
4) IC5001 (GC4PRO) communication error detection circuit



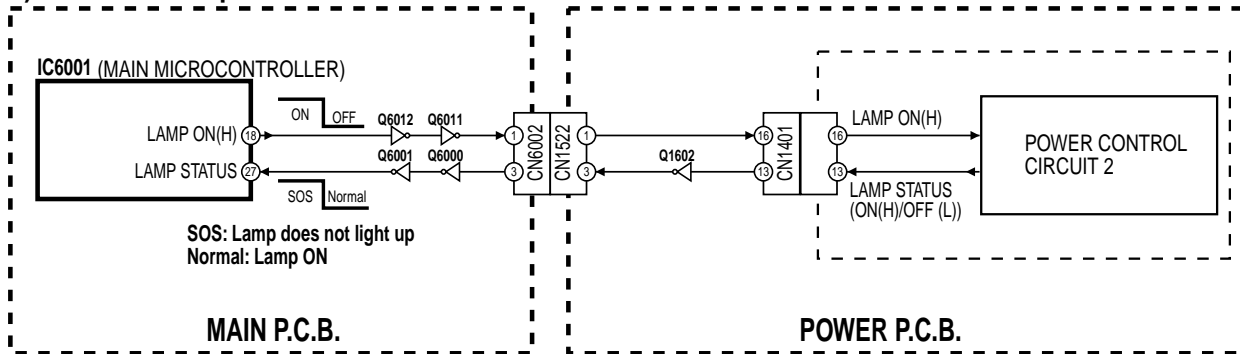
5, 6) Temperature Sensor error (shorted, open, or abnormal) detection circuit



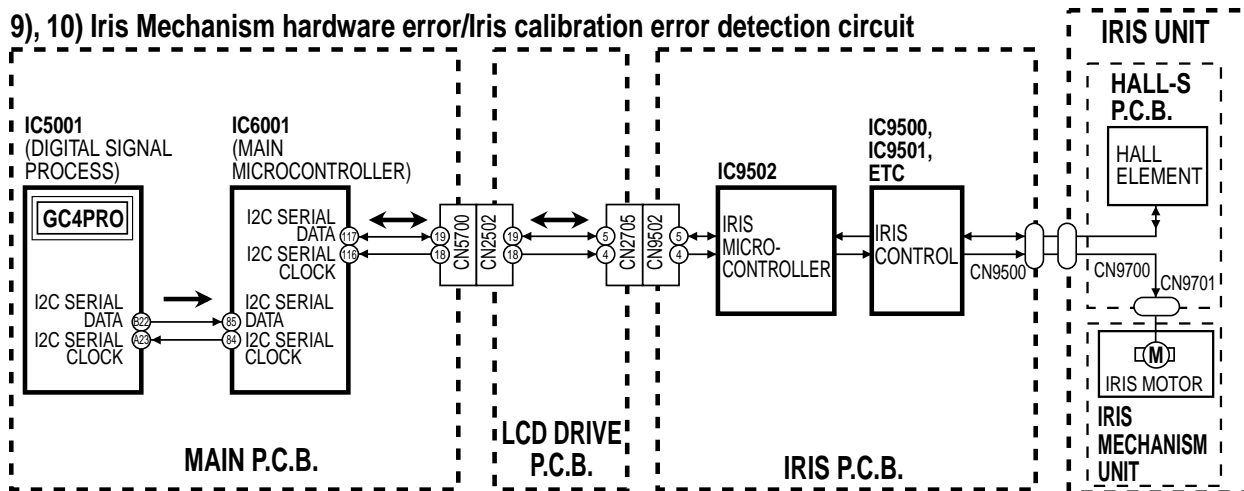
7) Clogged air filter detection circuit



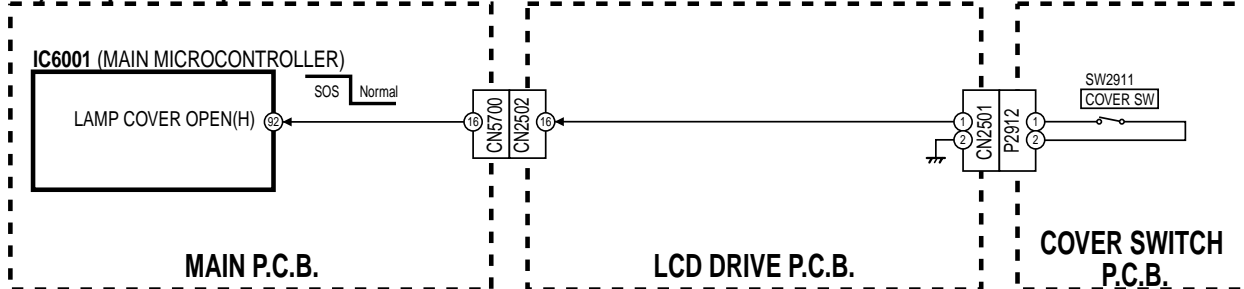
8) Abnormal Lamp detection circuit



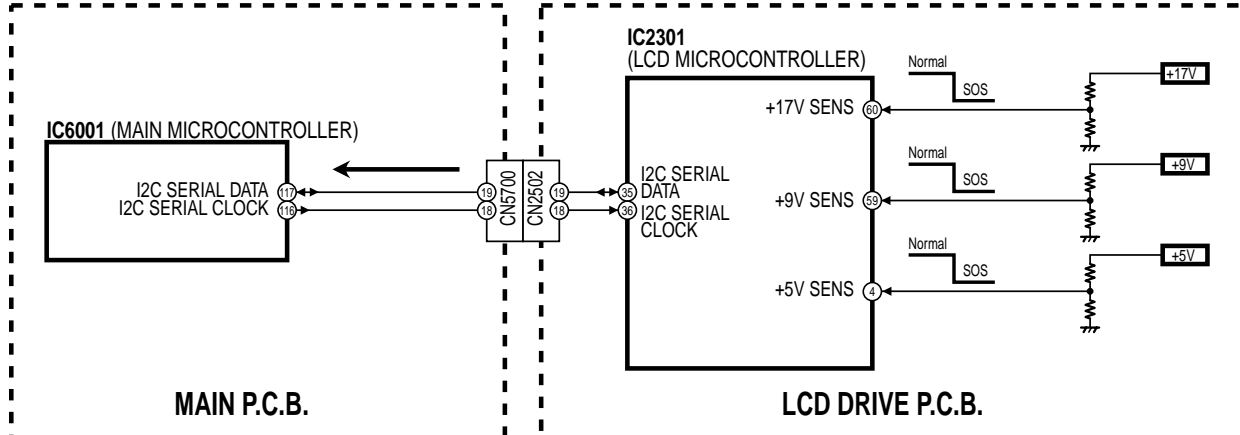
9), 10) Iris Mechanism hardware error/Iris calibration error detection circuit



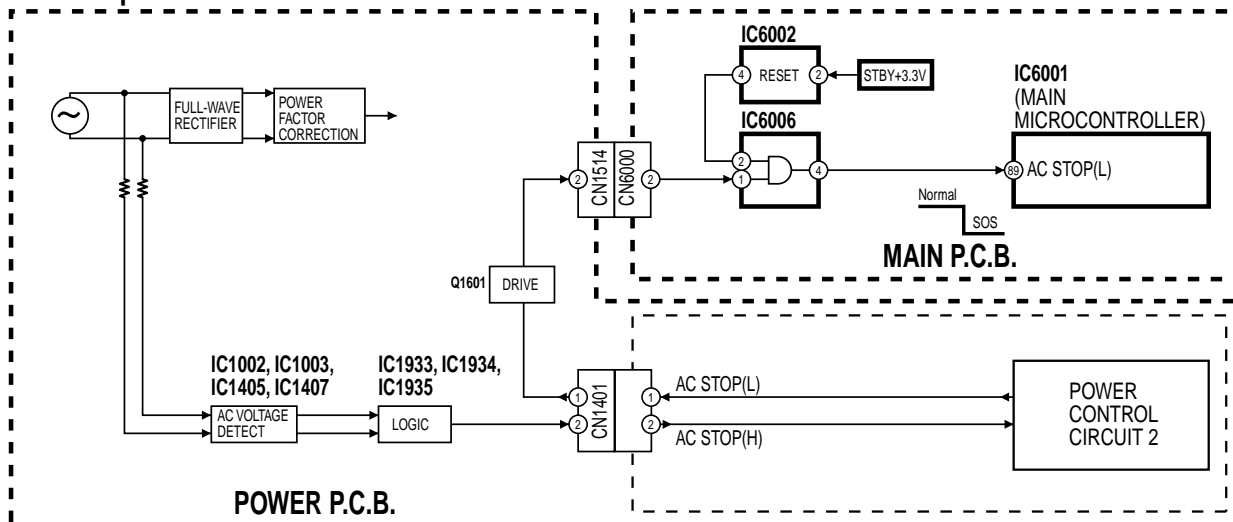
11) Lamp cover open detection circuit



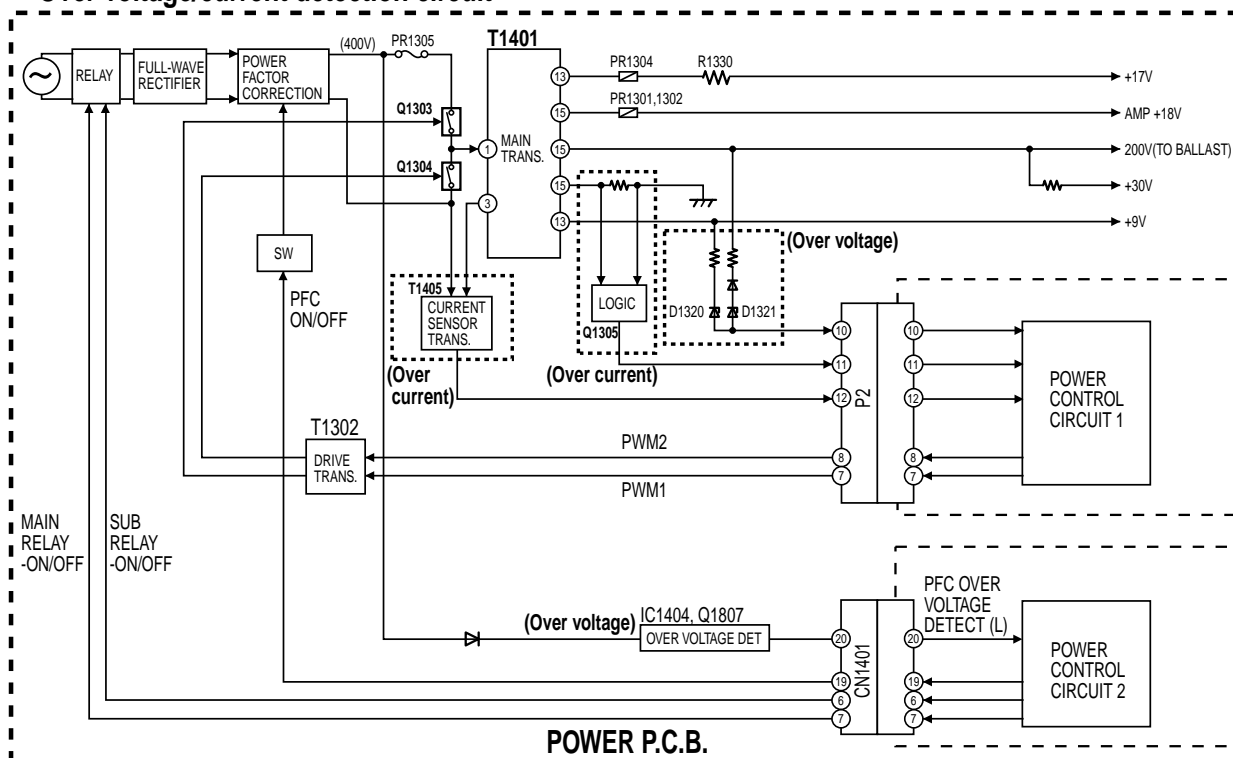
12) Abnormal voltage (+17V, +9V, +5V lines) detection circuit



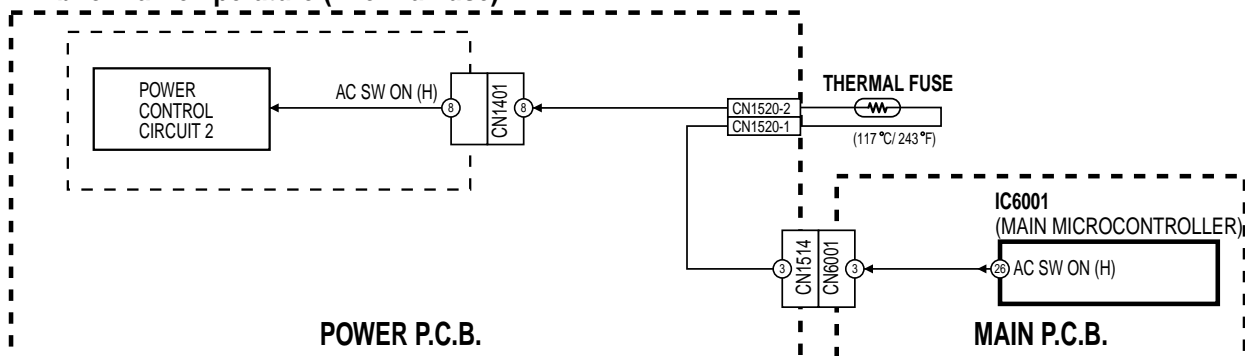
- **AC stop detection circuit**



- **Over voltage/current detection circuit**



- **Abnormal Temperature (Thermal fuse)**



How to solve problems indicated by the Error Indication of LED

(The symptom of all errors is that Lamp goes off or Lamp does not light up)

Note: Before performing the troubleshooting, confirm that all connector cables in the unit are connected correctly.

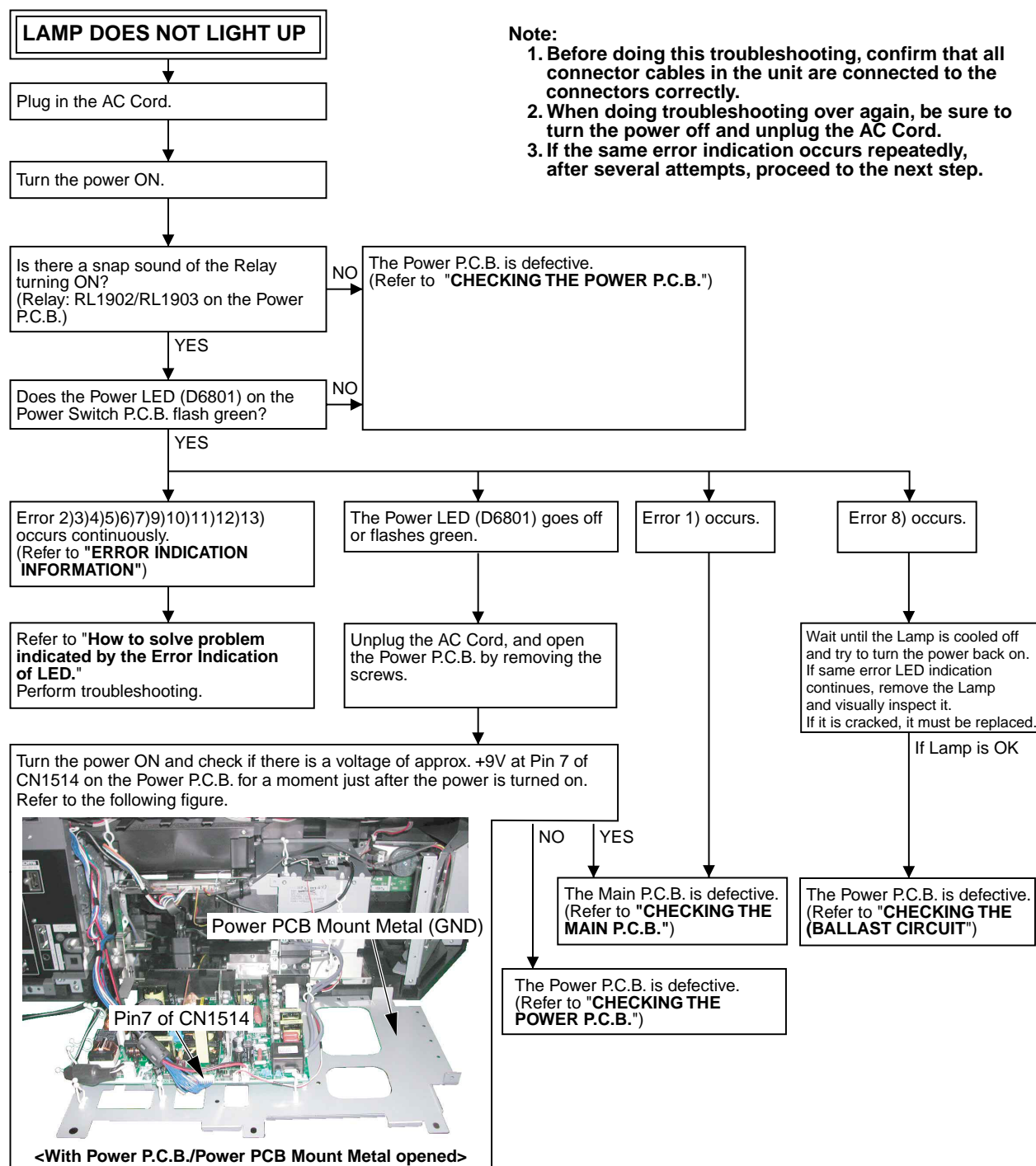
Error No.	Problem	Possible Solution
1)	Following voltage lines on the Main P.C.B. is over voltage or over current. • DT+9V line • DT+5V line • SW+3.3V line • SW+2.5V line	The Main P.C.B. is defective. (Refer to "CHECKING THE MAIN P.C.B.")
2)	Cooling Fan (Fan 1, Fan 2 and/or Fan 3) malfunction.	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> Are Fan 1, Fan 2 and Fan 3 operating for a moment just after the power is turned on? </div> <div> <div style="margin-bottom: 10px;"> All Fans stop. → Check IC2702, IC2703, and IC2704, and the surrounding parts on the LCD Drive P.C.B., and replace if necessary. </div> <div style="margin-bottom: 10px;"> Only Fan 1 stops. → Replace Fan 1. If still NG, check IC2702 and the surrounding parts on the LCD Drive P.C.B., and replace if necessary. </div> <div style="margin-bottom: 10px;"> Only Fan 2 stops. → Replace Fan 2. If still NG, check IC2703 and the surrounding parts on the LCD Drive P.C.B., and replace if necessary. </div> <div> Only Fan 3 stops. → Replace Fan 3. If still NG, check IC2704 and the surrounding parts on the LCD Drive P.C.B., and replace if necessary. </div> </div> </div>
3)	DT+5V line on the Main P.C.B. error.	Check the following parts of the +5V line on the Main P.C.B. and the Digital Tuner P.C.B., and replace if necessary. • IC1102 and the surrounding parts (Main P.C.B.) • R6008, IC6001, and the surrounding parts (Main P.C.B.) • +5V line and the surrounding parts (Digital Tuner P.C.B.) If still NG, the Power P.C.B. is defective. (Refer to "CHECKING THE POWER P.C.B.")
4)	Communication error I2C SERIAL DATA for between IC6001 (Pin 85) and IC5001 (Pin B22) on the Main P.C.B.	Check the following parts of the I2C SERIAL DATA line on the Main P.C.B., and replace if necessary. • IC5001, R5099, R6071, and the surrounding parts
5)	The temperature sensor (R2821) on the Thermistor 2 P.C.B. on the Lamp Top Panel is short or open.	Check the following parts on the Temperature Data 1 line on the LCD Drive P.C.B. and the Thermistor 2 P.C.B., and replace if necessary. • R2821 (Temperature Sensor on the Thermistor 2 P.C.B.),
6)	It indicates when the temperature detected by the Temperature Sensor (R2821) on Thermistor 2 P.C.B. exceeds 105 °C (221 °F). 1. The surrounding temperature of the place of use may be too high. 2. The vents on the rear may be blocked.	<ol style="list-style-type: none"> Relocate the unit to a proper location. <ul style="list-style-type: none"> Do not place in direct sunlight or other sources of direct heat. Do not place the unit in a humid or dusty location, or areas exposed to smoke or steam. (surrounding temperature should be between 0 °C (32 °F) and 35 °C (95 °F) and humidity should be between 20 % and 80 % (with no condensation).) The vents are not blocked. It is recommended that a gap of at least 10 cm is left all around the unit even when it is placed inside a cabinet or between shelves. Check if the fans are operating properly.
7)	Clogged Air Filter of the Fan Case Unit.	Clean the Air Filter of the Fan Case Unit. If still NG, replace Fan Case Unit (Fan 1). If still NG, check the following parts on the Filter Error Detection line on the LCD Drive P.C.B., and replace if necessary. • LVDS Cable between the Main P.C.B. and the LCD Drive P.C.B. • IC2301, IC2705, and the surrounding parts (LCD Drive P.C.B.)
8)	1. The Lamp is defective (crack). 2. The Power P.C.B. is defective.	1. Wait until the Lamp is cooled off and try to turn the power back on. If same error LED indication continues, remove the Lamp and visually inspect it. If it is cracked, it must be replaced. If the Lamp is OK, the Power P.C.B. is defective. (Refer to "CHECKING THE BALLAST CIRCUIT")
9)	When the Iris Mechanism fails to reach the objective angle of $\pm 2^\circ$ in two consecutive seconds.	Replace the Iris Unit.
10)	When power is turned on, the Iris Mechanism performs calibration to incorporate variations detected by the Hall Sensor. A maximum current (+) and (-) is supplied to the Motor and the Mechanism moves to the full-open/ full-close position. An error occurs when this angle is measured by the Hall Sensor and full-open/ full-close is not reached, or when the angle difference is outside the controllable range.	<ol style="list-style-type: none"> Replace the Iris Unit. If still NG, replace IC9500, IC9501, IC9502, etc. on the Iris P.C.B.

How to solve problems indicated by the Error Indication of LED

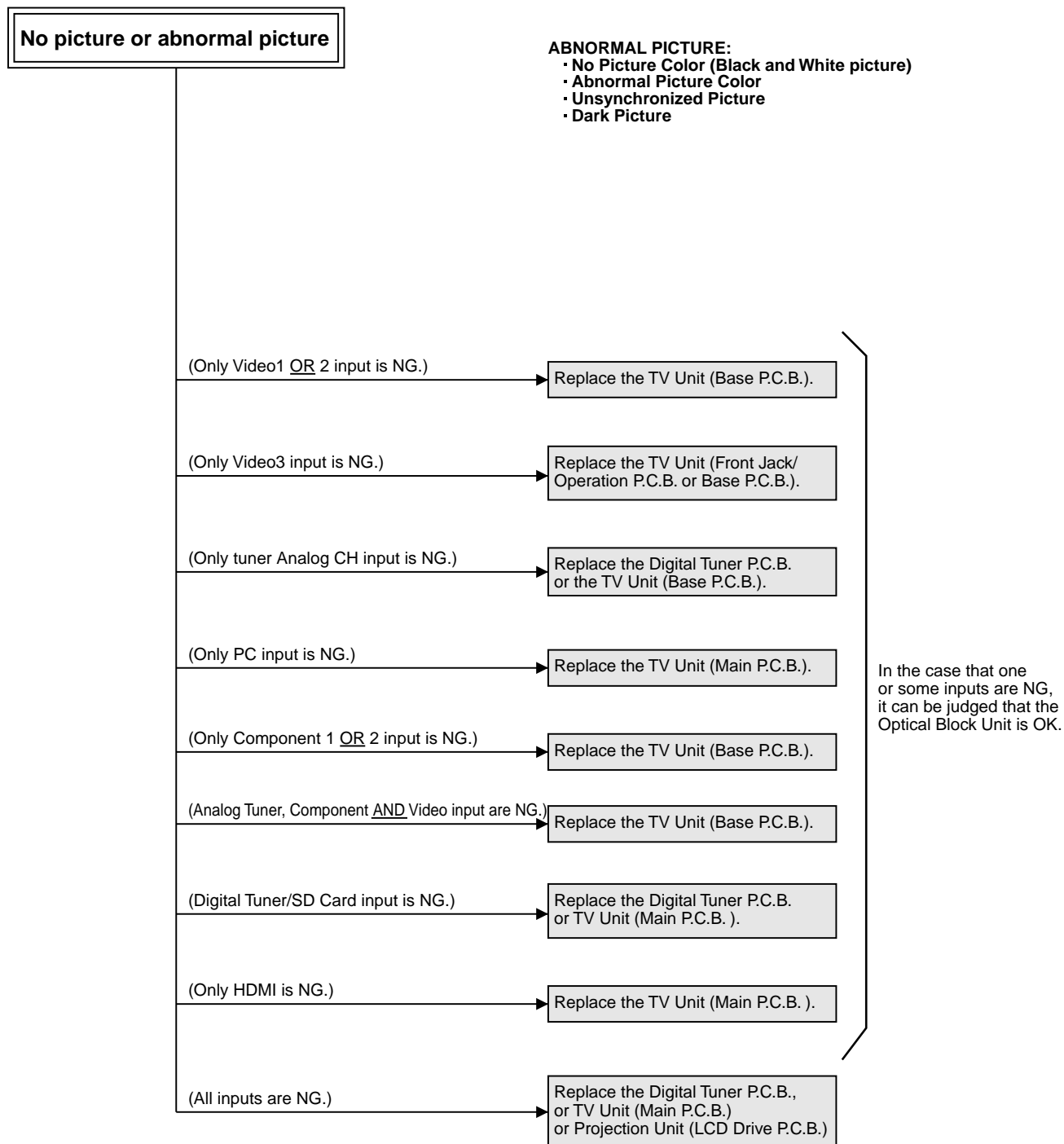
(The symptom of all errors is that Lamp goes off or Lamp does not light up)

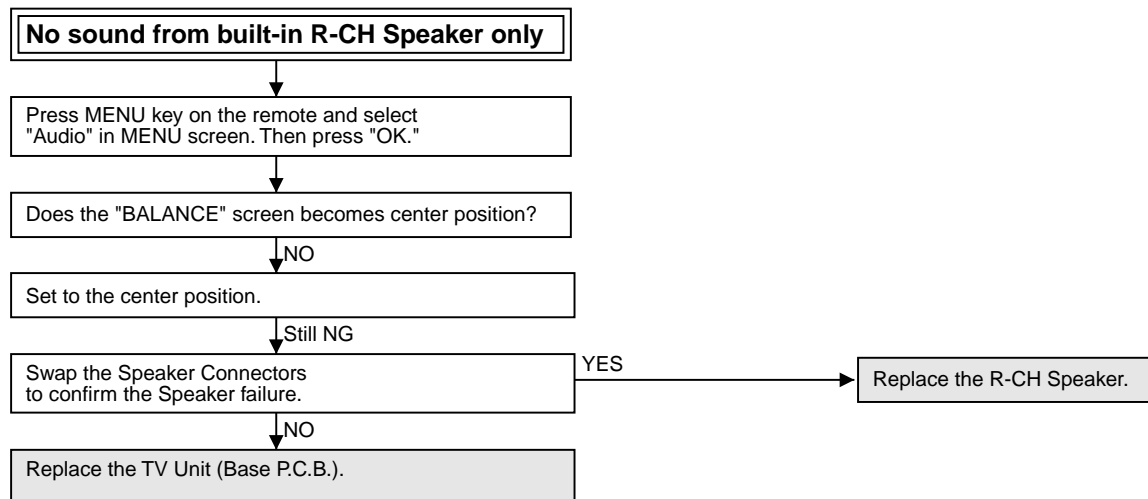
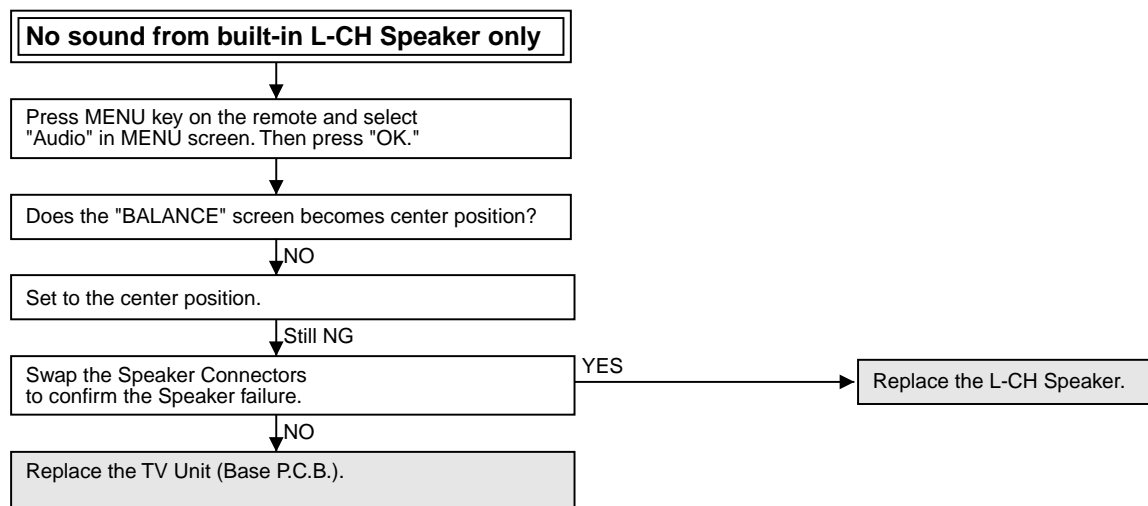
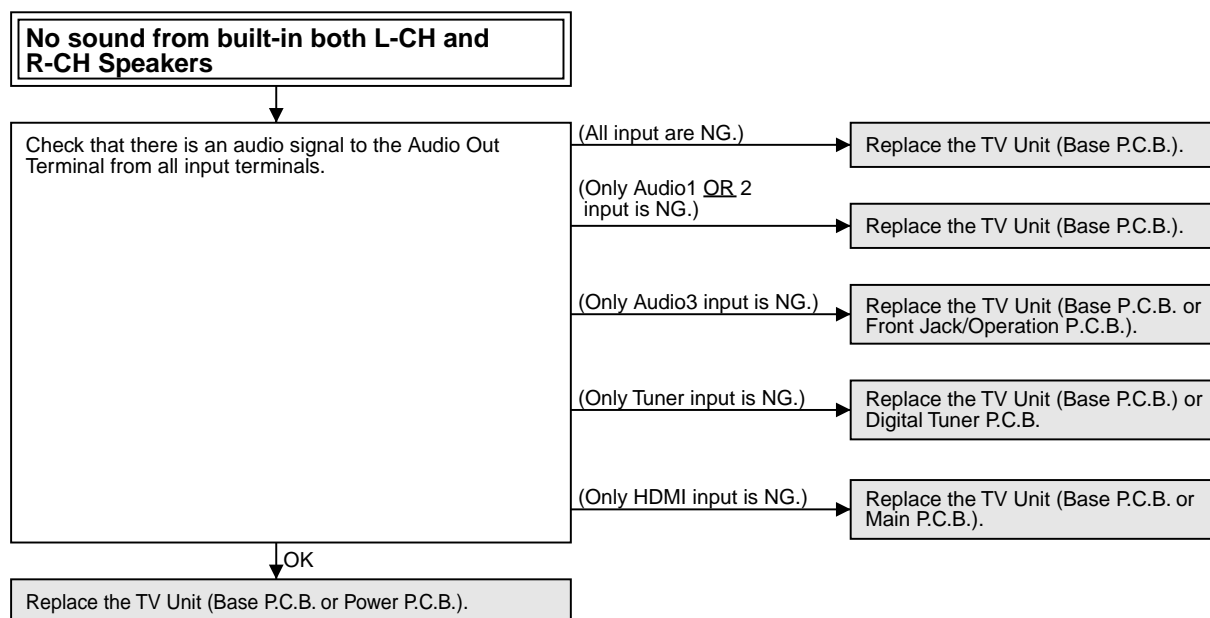
Note: Before performing the troubleshooting, confirm that all connector cables in the unit are connected correctly.

Error No.	Problem	Possible Solution
11)	Mis-installed Lamp Cover (the Lamp cover is open).	1. Check the Cover Switch P.C.B. If still NG, install the Lamp Cover Unit properly. 2. If still NG, check the following parts on Lamp Cover Open (H) signal line on the Main P.C.B., and replace if necessary. <ul style="list-style-type: none"> • LVDS Cable between the Main P.C.B. and the LCD Drive P.C.B. • IC6001, R6231, and the surrounding parts (Main P.C.B.). • SW2911 (Cover Switch P.C.B.)
12)	1. +17V line on the LCD Drive P.C.B. error. 2. +9V line on the LCD Drive P.C.B. error. 3. +5V line on the LCD Drive P.C.B. error.	1. Disconnect Connector CN2704 on the LCD Drive P.C.B. Turn the unit power on, check the voltage at pins of cable connector from the Main P.C.B. <ul style="list-style-type: none"> • Pin1: approx. +17V • Pin2: approx. +9V • Pin3: approx. +5V • Pin4: approx. +3.3V If NG, refer to " CHECKING THE MAIN P.C.B. " 2. If OK, perform the following steps: <ol style="list-style-type: none"> 1) +17V line on the LCD Drive P.C.B. error Check IC2301, R2317, and the surrounding parts (LCD Drive P.C.B.). 2) +9V line on the LCD Drive P.C.B. error Check IC2301, R2318, and the surrounding parts (LCD Drive P.C.B.). 3) +5V line on the LCD Drive P.C.B. error Check IC2301, R2308, and the surrounding parts (LCD Drive P.C.B.).



HOW TO DETERMINE WHICH P.C.B. IS DEFECTIVE





CHECKING THE POWER P.C.B.

Note:

1. The Projection Unit includes the Power P.C.B.
2. Do not turn or adjust VRs (R1324, R1703, R1951).

Disconnect all connector cables on the Power P.C.B., then take out the Power P.C.B. from the Power PCB Mount Metal.

Refer to Power P.C.B. Service Position, Figure 1.

CAUTION:

Do not touch any parts to reduce the risk of electric shock after the AC Cord has been plugged in even once. Before checking parts, confirm that the voltage C1810 is 0V. If not, discharge C1810 terminals by using a resistor of 100 ohm/10 W or over for 3 seconds.

Check the following parts on the Power P.C.B. with the tester.

F1001, F1002, PR1301, PR1302, PR1304, PR1305, D1001, D1305, D1309, D1310, D1311, D1312, D1313, D1315, D1317, D1403, D1404, D1405, D1406, D1505, D1519, D1528, D1529, D1530, D1531, D1532, D1533, D1805, D1808, D1931, D1932, D1933, D1940, Q1303, Q1304, Q1401, Q1503, Q1801, R1005, R1330, R1408, R1409, R1410, R1411, R1511, R1512, R1933

OK

NG

Replace any defective parts.

Solder a jumper between TP1502 and TP1901 on the Power P.C.B.

Plug in the AC Cord.

Check the other parts on the Power P.C.B. and replace any defective parts.

CAUTION:

Do not touch any parts to reduce the risk of electric shock after the AC Cord has been plugged in even once. Before checking parts, confirm that the voltage C1810 is 0V. If not, discharge C1810 terminals by using a resistor of 100 ohm/10 W or over for 3 seconds.

Is there a snap sound of the Relay turning ON?
(Relay: RL1902/RL1903 on the Power P.C.B.)

NG

OK

Check the following parts with the tester.

RL1902, RL1903, R1700, R1701, R1704, R1705

Replace any defective parts.

CAUTION:

Do not touch any parts to reduce the risk of electric shock after the AC Cord has been plugged in even once. Before checking parts, confirm that the voltage C1810 is 0V. If not, discharge C1810 terminals by using a resistor of 100 ohm/10 W or over for 3 seconds.

Check if the voltage at D1940-CATHODE is $13.5\text{ V} \pm 1.0\text{ V}$.
(Use bottom part of Radiation Plate for COLD circuit as GND.)

NG

OK

Check if the voltage at TP1908 is $\text{DC}7.0\text{V} \pm 0.5\text{ V}$.
(Use bottom part of Radiation Plate for COLD circuit as GND.)

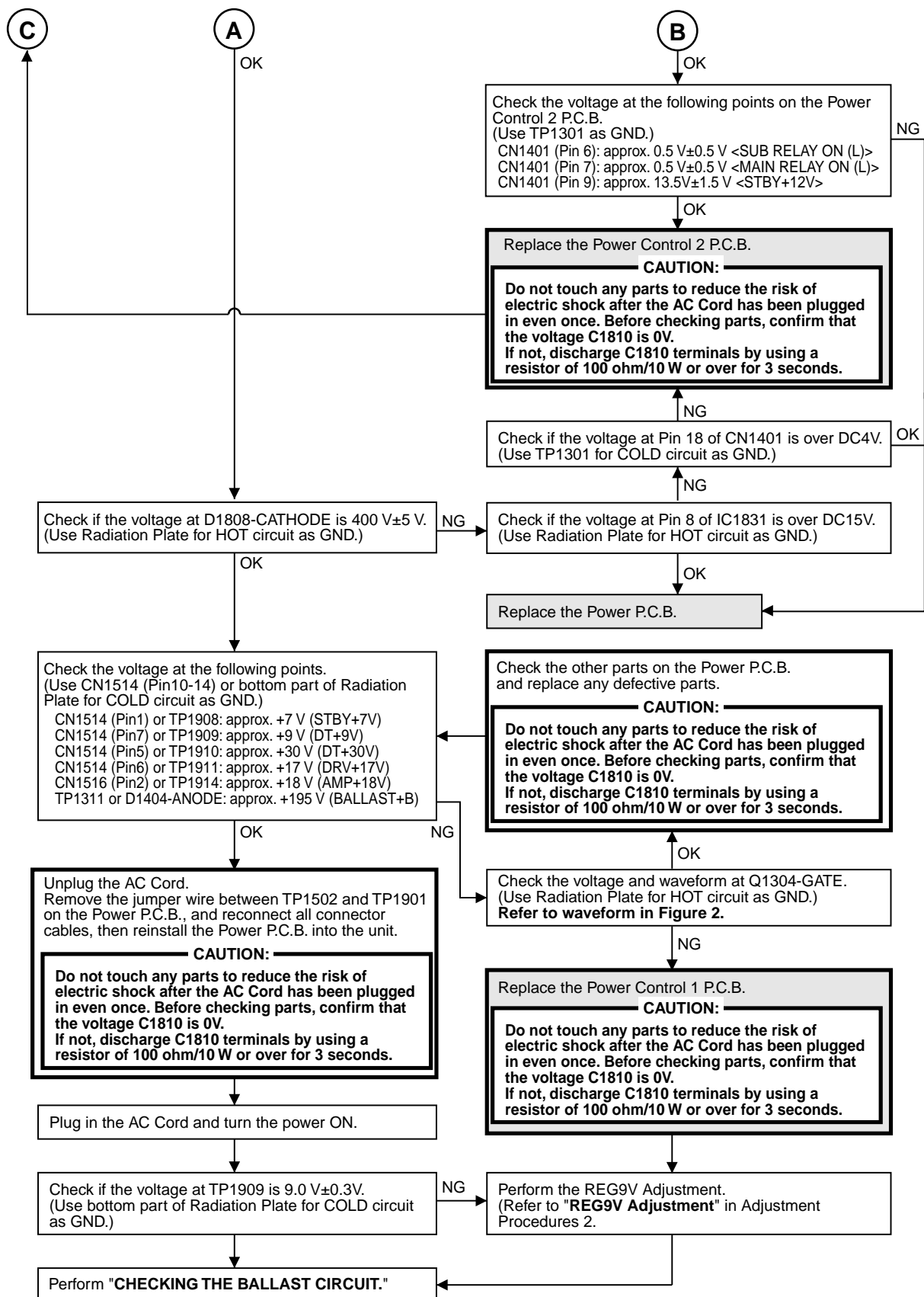
NG

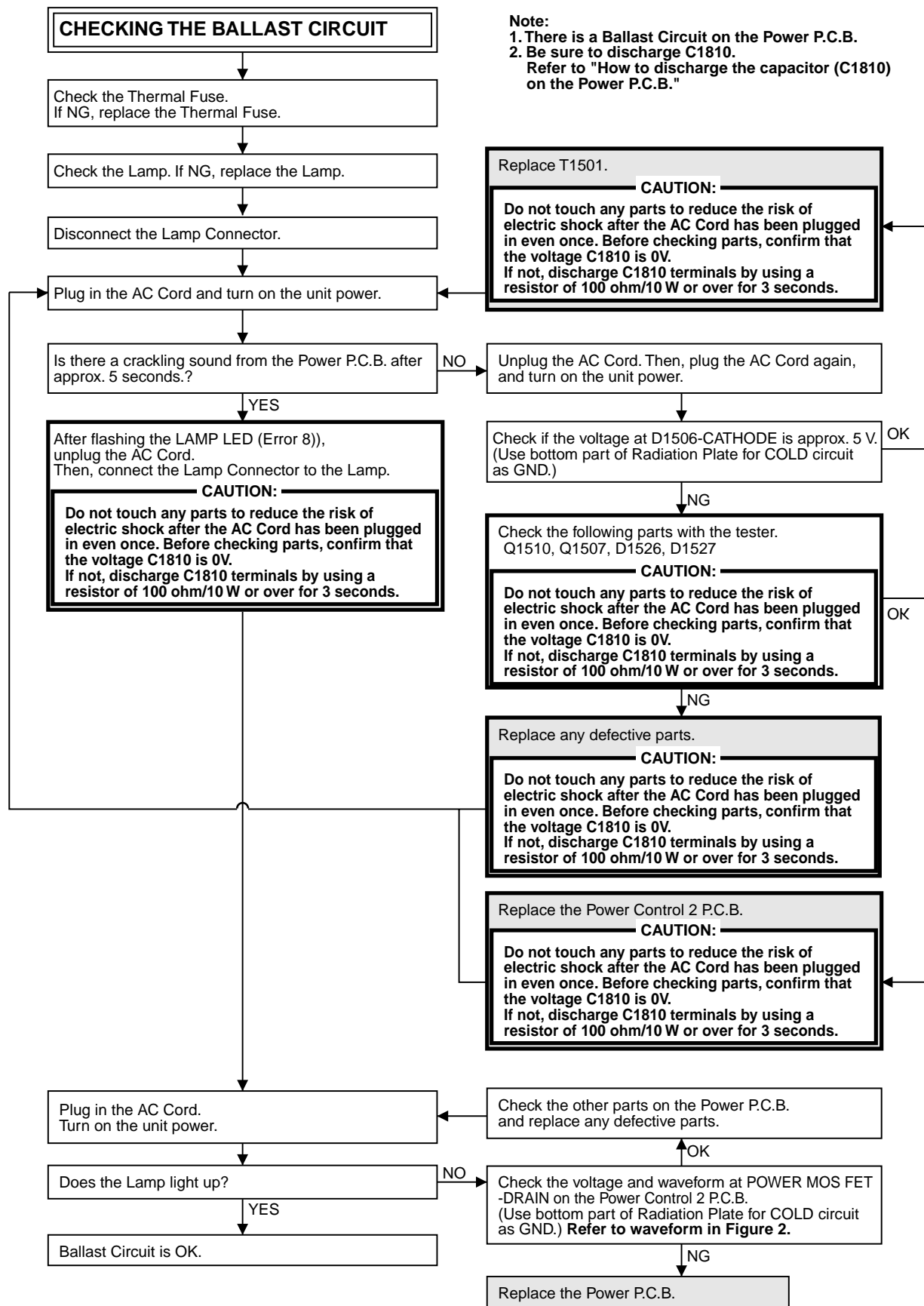
OK

C

A

B

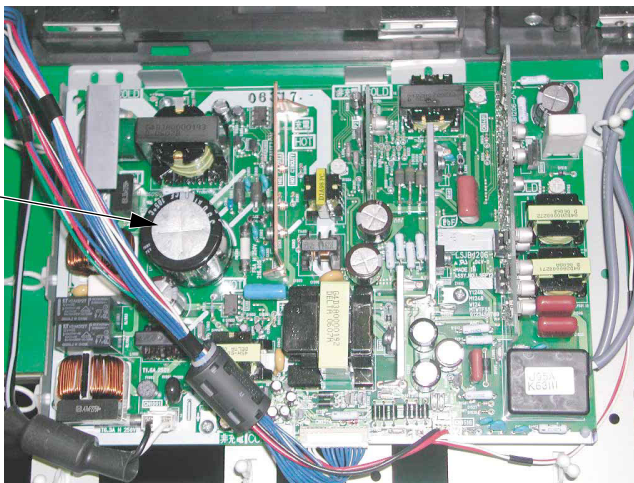




CAUTION:

High voltage exists on the Power P.C.B. While removing Power P.C.B., do not touch any parts on the board. Hold the edge of the board when removing it.

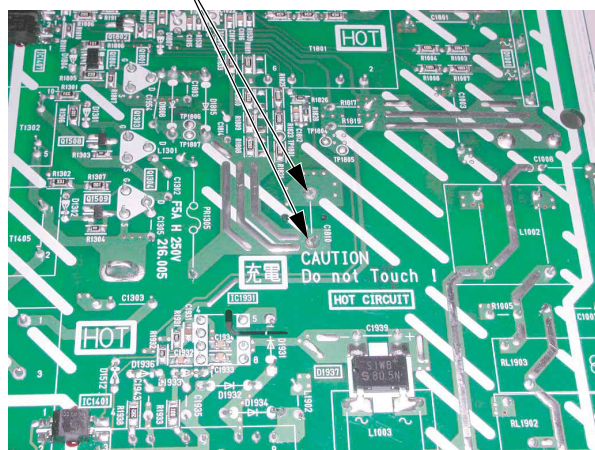
C1810:
High voltage
generated.
(approx. 400 V)



How to discharge the capacitor (C1810) on the Power P.C.B.

High voltage exists in C1810 after the AC Cord has been plugged in even once.
Before servicing, be sure to discharge the C1810 terminals by using a resistor of 100 ohm/10 W or over for 3 seconds.
Or, discharge D1808 cathode to the Radiation Plate (HOT GND).

C1810 terminals

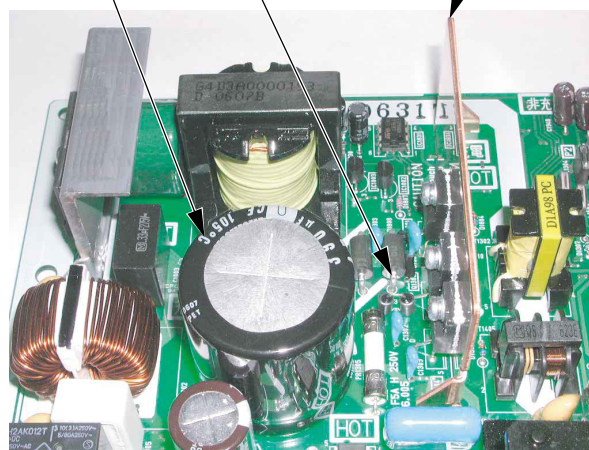


(foil side)

D1808 cathode Radiation Plate (HOT GND)

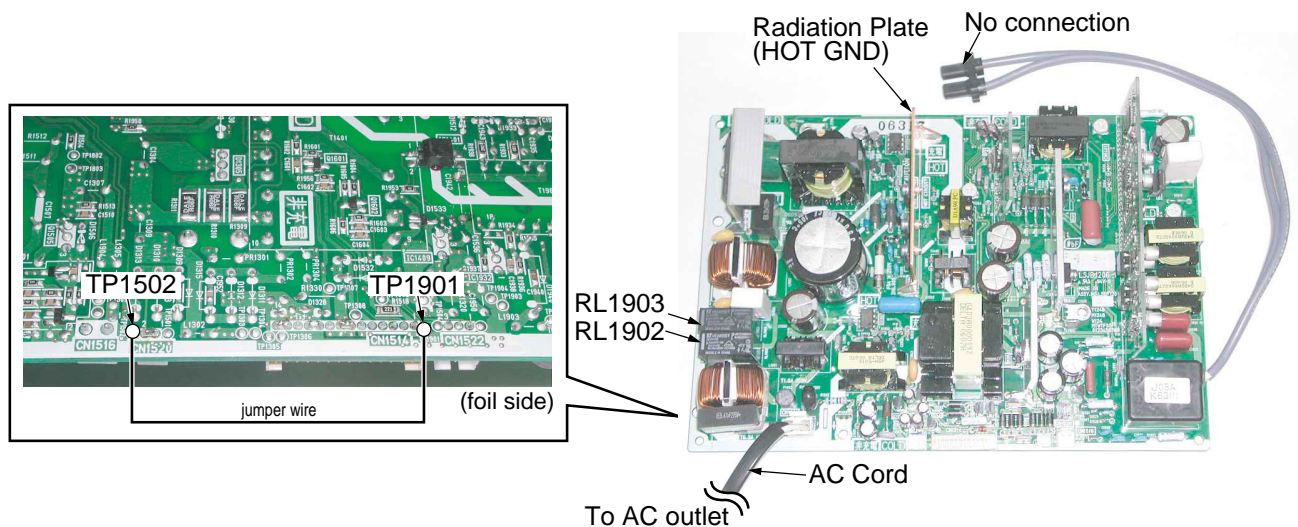
C1810

OR



(component side)

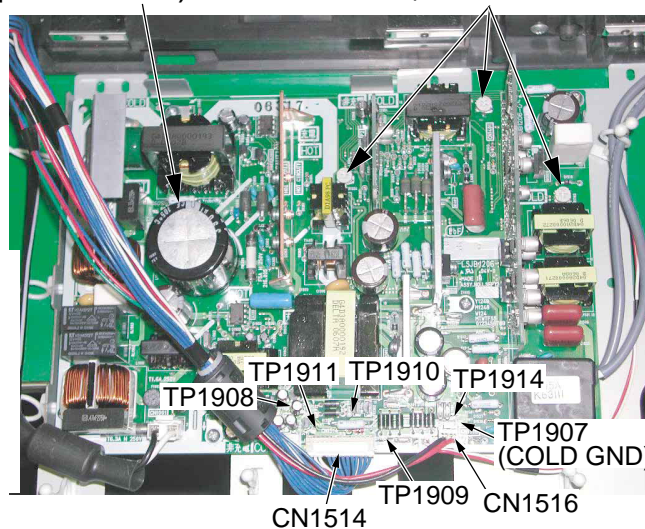
Power P.C.B. Service Position



Test Points for checking the voltage on the Power P.C.B.

C1810:
High voltage generated.
(approx. 400 V)

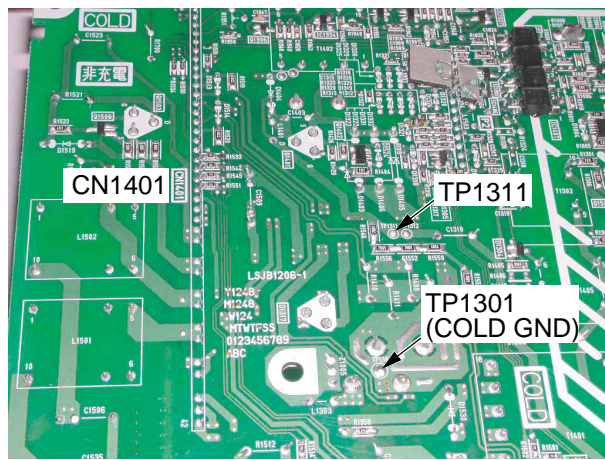
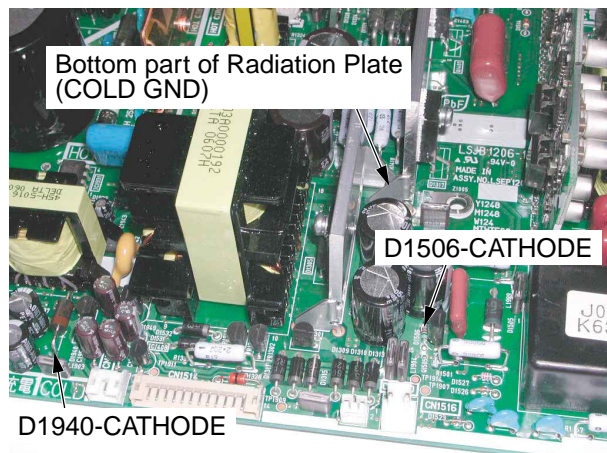
Note:
Do not turn or adjust VRs
(R1324, R1703, R1951).



Note: For reference, this illustration shows Power P.C.B./Power Mount Metal opened.

Figure. 1

Test Points for checking the voltage on the Power P.C.B.



(foil side)

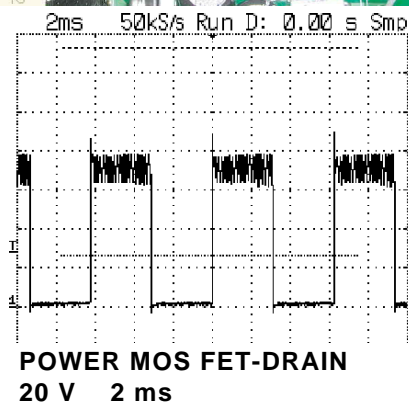
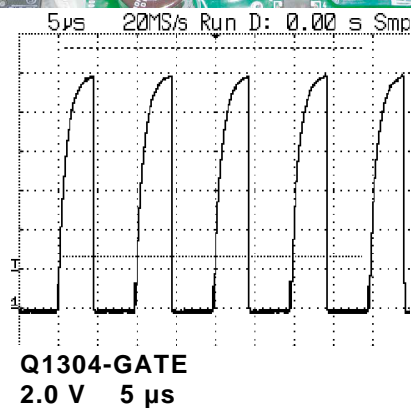
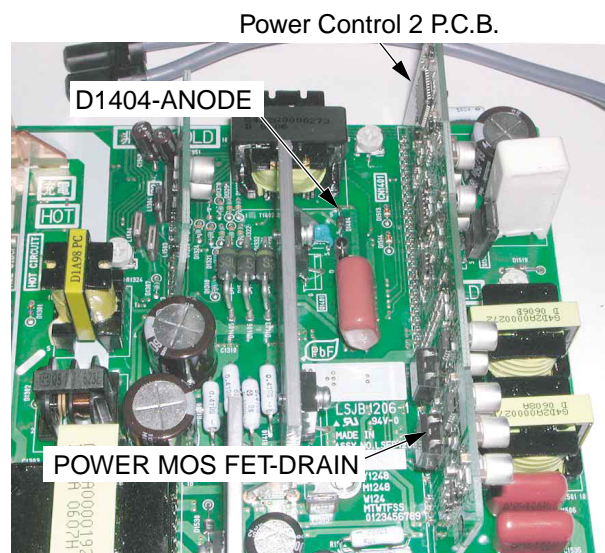
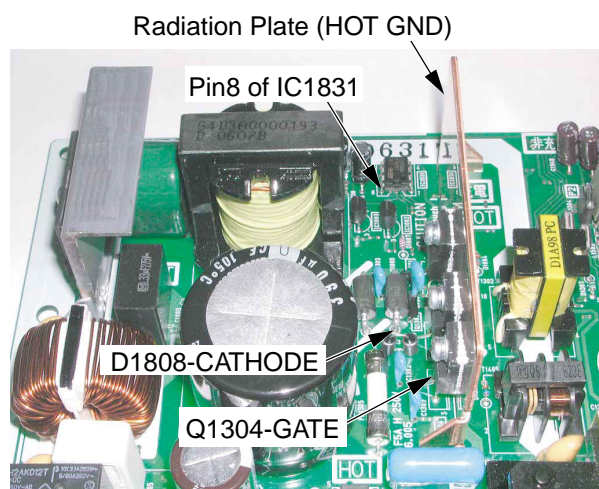
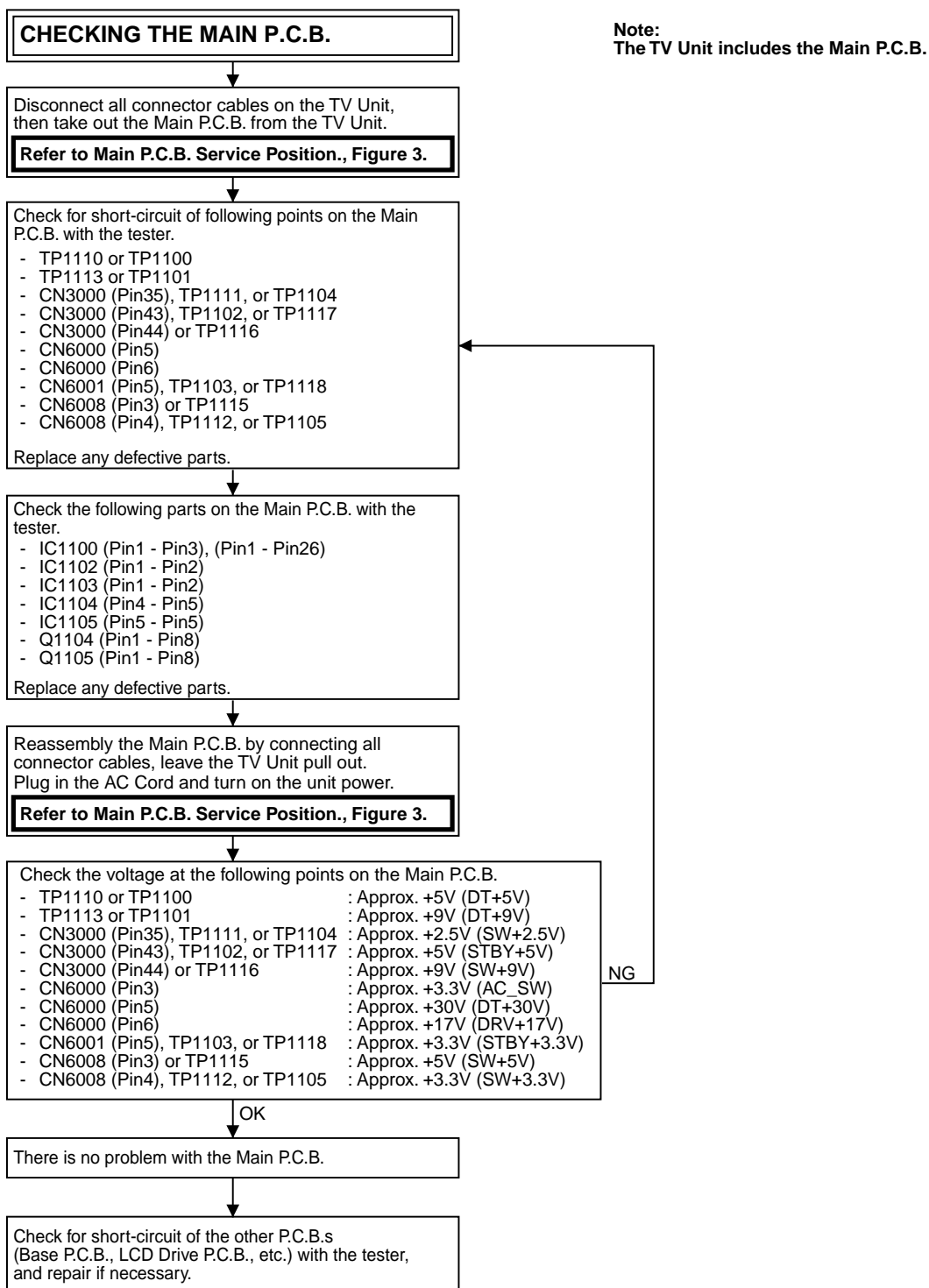
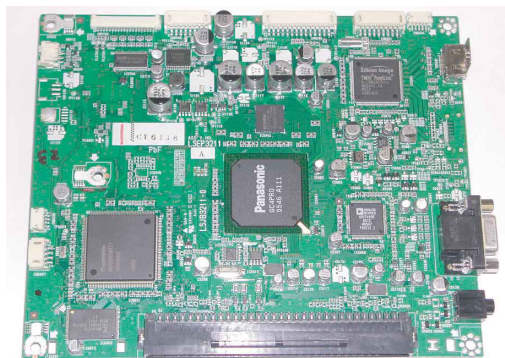


Figure. 2



Main P.C.B. Service Position



Test Points for checking the voltage on the Main P.C.B.

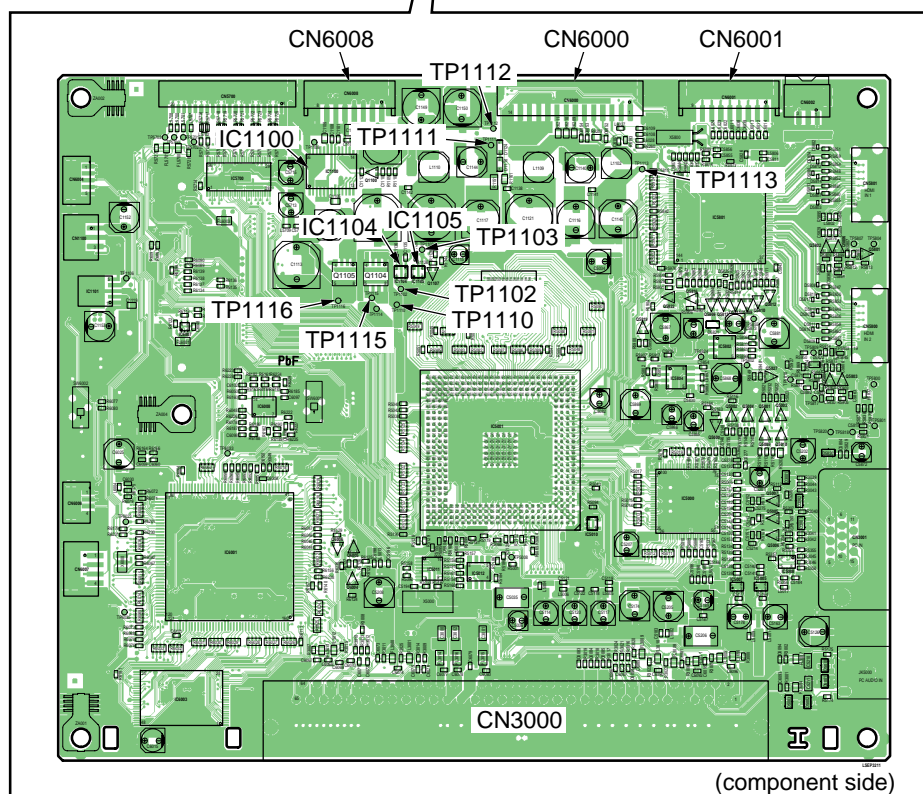
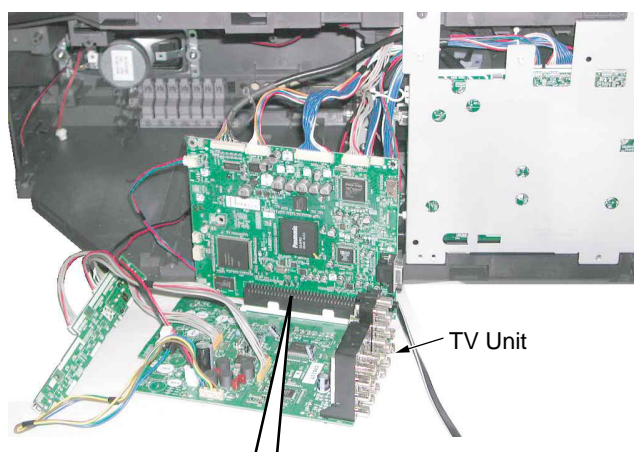
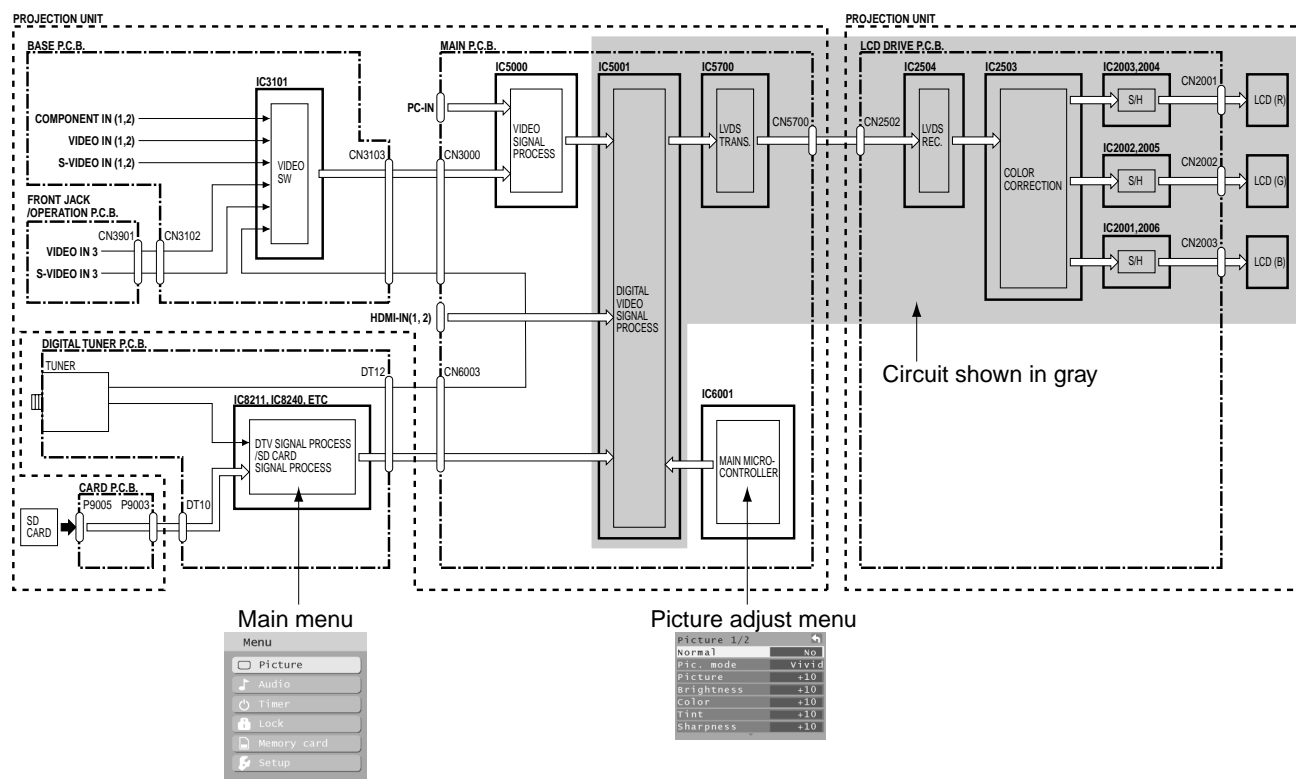


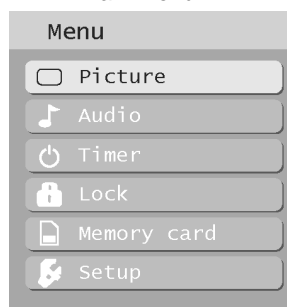
Figure. 3

Tips for determining defective circuit in the case of picture problem



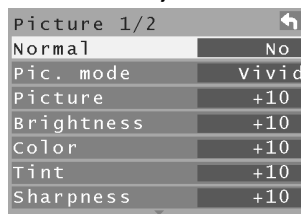
- 1) Input the signal and display it.
[Input picture is not displayed normally.]
- 2) Press MENU key to display the Main menu.

Main menu



- 3) Press OK key to select Picture card adjust menu.

Picture adjust menu



- 4) If the Picture adjust menu is displayed normally, the circuit shown in gray is judged OK.
If the Picture adjust menu is not displayed normally, something is wrong with the circuit shown in gray.
(Most possibly: Projection Unit)

8 Service Fixture & Tools

8.1. Service Fixture and Tools

LSEP3112A
LSUA0042

Relay P.C.B.
LCD Panel Flat Extension Cable

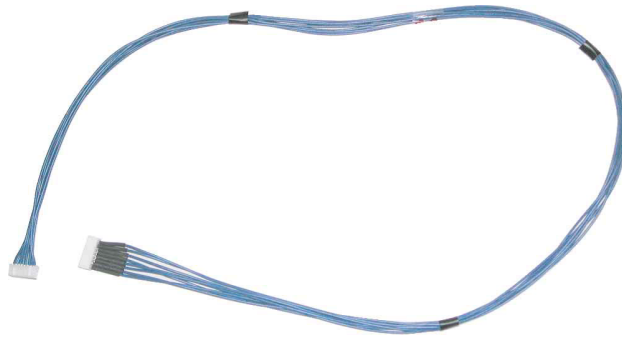


Note:

- 1) 3 of each are required for servicing.
- 2) Extension Cable-5 which was included in the 2002 model checker can be used for Relay P.C.B. (LSEP3112A) and LCD Panel Flat Extension Cable (LSUA0042).

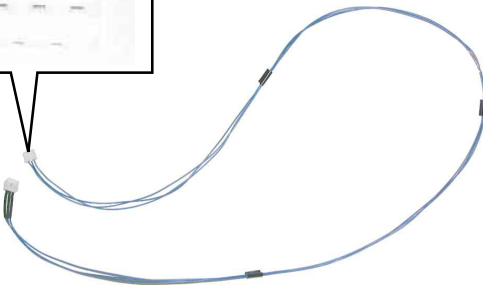
LSUA0038

Power Extension Cable



LSUA0039

Fan1,3 Extension Cable

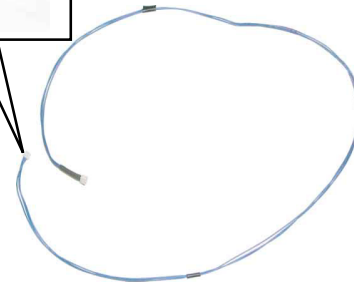


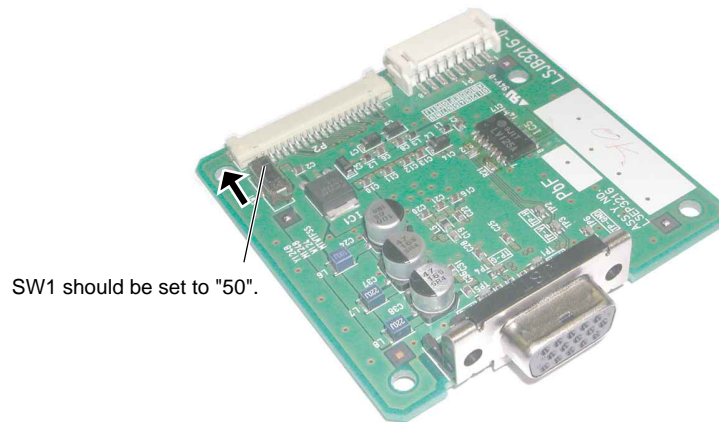
Note:

2 of each are required for servicing.

LSUA0040

Fan2 Extension Cable

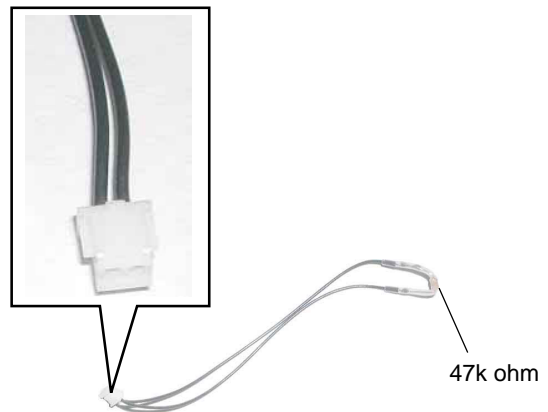


LSEP3216A**Monitor P.C.B.**

SW1 should be set to "50".

LSUA0041**Cover Switch Defeat Cable****Note:**

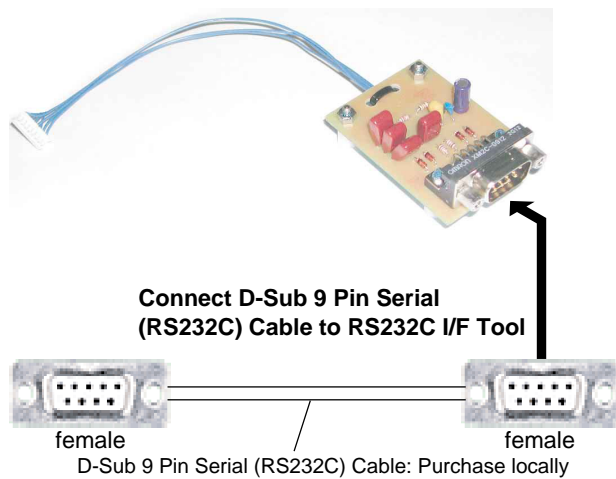
A replacement part (LSJA0476, LSJA0551), which is shorted, can be used for this service tool.

LSUA0013**Thermistor 2 Defeat Cable**

47k ohm

Note:

Replacement part (LSJA0533, LSJA0478), to which a 47k ohm resistor has been attached, can be used for this service tool.

LSUA0043**RS232C I/F Tool**

Connect D-Sub 9 Pin Serial
(RS232C) Cable to RS232C I/F Tool

female

D-Sub 9 Pin Serial (RS232C) Cable: Purchase locally

female

RS232C Connecting tool
(For 2002 models (PT-40LC12/45LC12))**Note:**

RS232C Connecting tool which was included in the 2002 model checker as shown above can be used for both RS232C I/F Tool (LSUA0043) and D-Sub 9 Pin Serial (RS232C) Cable.

8.2. Service Position

MAIN P.C.B. CHECK

It is possible to check the Main P.C.B. and also to check the Front Jack/Operation P.C.B., the Base P.C.B. and the Power P.C.B. by using the Monitor P.C.B. without connecting the Projection Unit.

The following service tool is required:

- Monitor P.C.B. (LSEP3216A)

The following equipment is required:

- XGA Color PC Monitor
- D-Sub 15 Pin RGB Cable (for connecting the Monitor P.C.B.)
- PC (2) for Test Pattern Signal
- D-Sub 15 Pin RGB Cable (for connecting the PC Input Terminal)

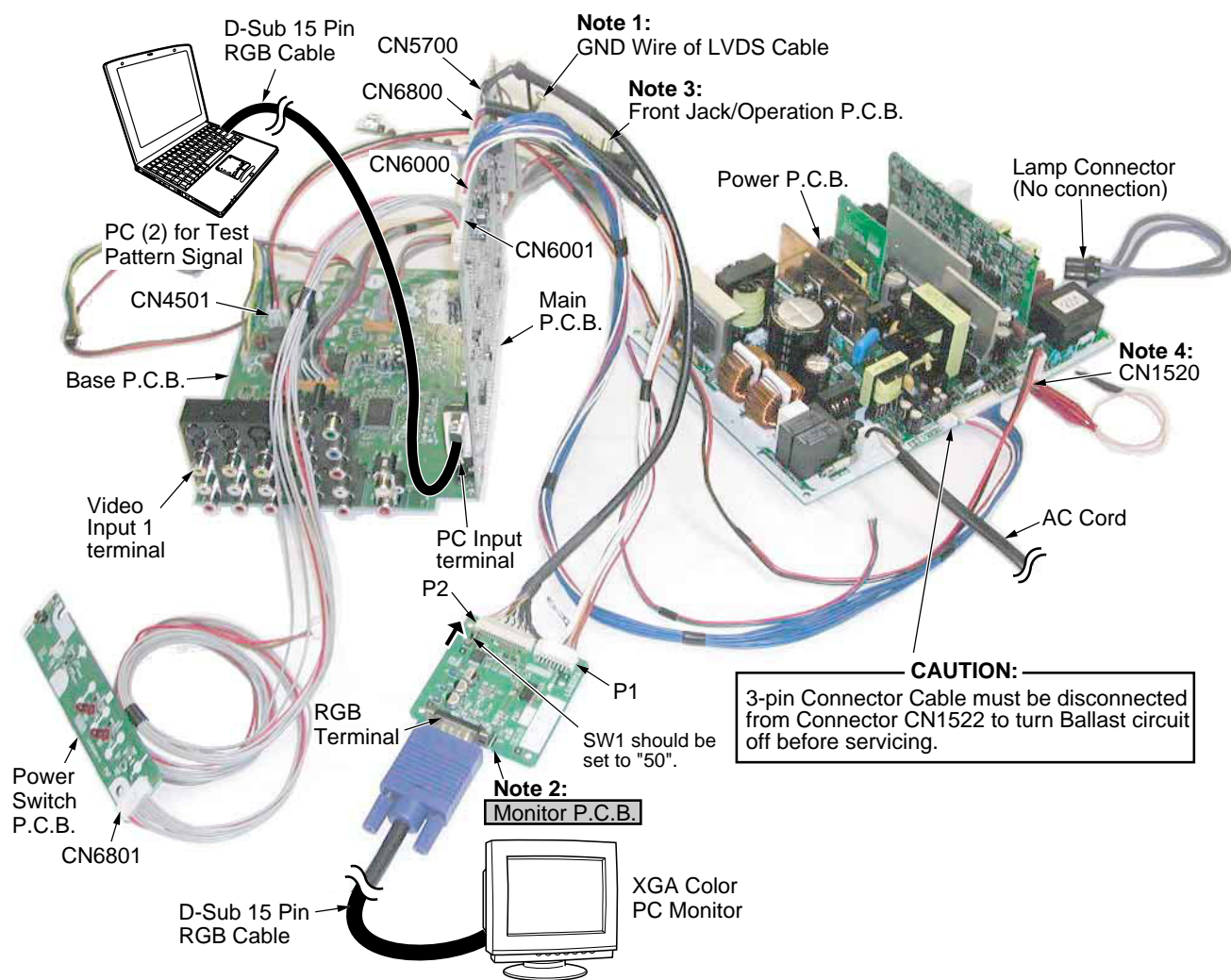
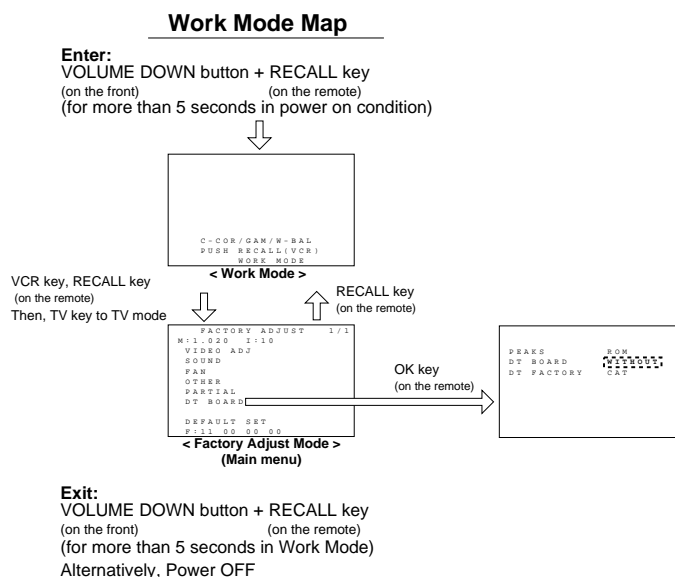


Fig. S1-1

Note for Service Position (1):

1. It is not necessary to connect the GND Wire of the LVDS Cable when servicing.
2. Any error detect functions such as Fan stop, temperature, etc. are defeated on the Monitor P.C.B. Also, SW1 on the Monitor P.C.B. should be set to "50."
3. When changing the input mode, point a remote at IR receiver on the Front Jack/Operation P.C.B.
4. When servicing without the Thermal Fuse connected:
Short CN1520 by clip so as not to bend the pins. Or, solder a jumper between pin1 of CN1520 and GND (Foil side).
5. For operation stability without the Digital Tuner P.C.B. installed, be sure to perform either a) or b) in this position before servicing.
 - a) Change the DT BOARD mode from "WITH" to "WITHOUT."
(While DT BOARD is in "WITHOUT" mode, it can be serviced even if Work Mode is released.)
After servicing, be sure to return DT BOARD to "WITH" mode.
 - b) Or, enter Work Mode and wait for over 10 seconds without the Digital Tuner P.C.B. installed. However, in this case, the mode indication is "WITH" continuously.

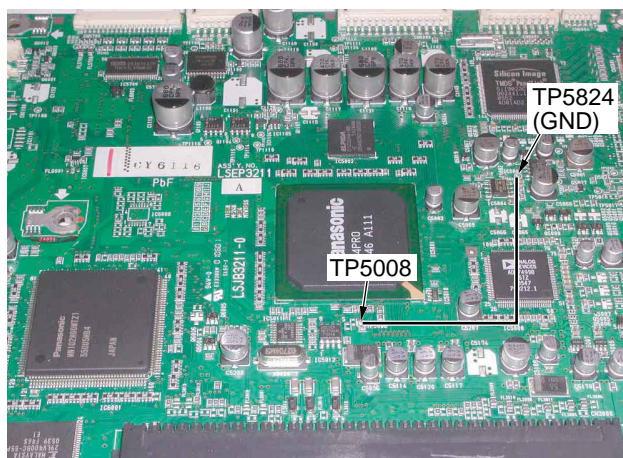


FACTORY ADJUST 1/1
N:1.000 1-10
VIDEO ADJ
SOUND
PAW
OTHER
PARTIAL
DT BOARD
DEFAULT SET
P:11 00 00 00
< Factory Adjust Mode >
(Main menu)

OK key
(on the remote)

PEAKS
DT BOARD
DT FACTORY
CAT

6. To reduce the jitter noise on the XGA Color PC Monitor in this Position, perform either a) or b).
 - a) Enter Work Mode.
Press DVD key to go to DVD mode, then STOP key on the remote.
 - b) Or, solder a jumper between TP5008 and TP5824 (GND) on the Main P.C.B.



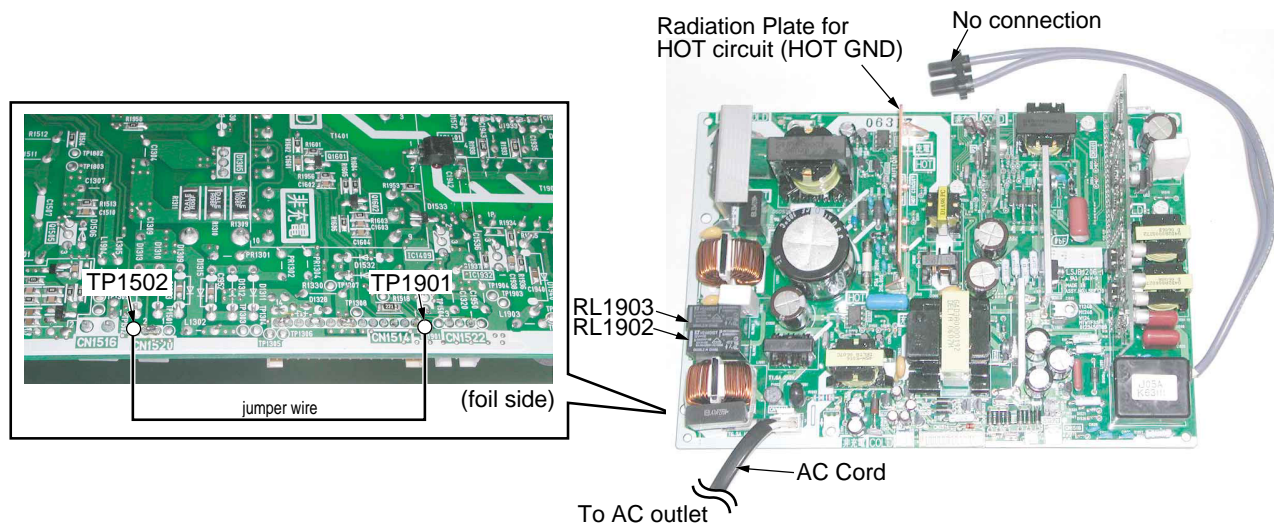
Main P.C.B. (Component Side)

Fig. S1-2

POWER P.C.B. CHECK

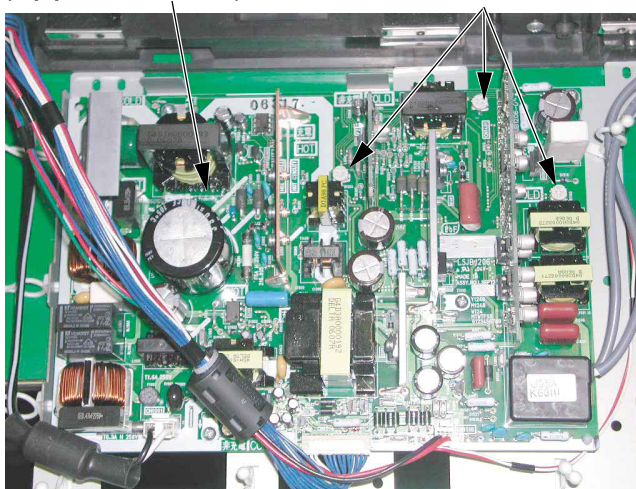
It is possible to check the Power P.C.B. only with no load.

Power P.C.B. Service Position



C1810:
High voltage generated.
(approx. 400 V)

Note:
Do not turn or adjust VRs
(R1324, R1703, R1951).



Note: For reference, this illustration shows Power P.C.B./Power Mount Metal opened.

Fig. S1-3

Refer to "CHECKING THE POWER P.C.B." in "Troubleshooting Hints for Component Level Repair."

Note:

To turn on, solder a jumper between TP1502 (ATSC ON (H)) and TP1901 (STBY+7V).

SERVICE POSITION (2) LCD DRIVE P.C.B. CHECK, FULL MIRROR ADJUSTMENT & POLARIZER ADJUSTMENT OF PROJECTION UNIT

It is possible to adjust the Full Mirror and Polarizer of Projection Unit.

The following service tools are required:

- LCD Panel Flat Extension Cable X3
- Relay P.C.B. X3
- Fan1,3 Extension Cable (LSUA0039) X2
- Fan2 Extension Cable (LSUA0040)
- Power Extension Cable (LSUA0038)
- Thermistor 2 Defeat Cable (LSUA0013)
- Cover Switch Defeat Cable (LSUA0041)

The following equipment is required:

- Screen
- PC (2) for Test Pattern Signal
- D-Sub 15 Pin RGB Cable (for connecting the PC Input Terminal)

The following original parts are not connected:

- Thermistor 2 P.C.B.
- Cover Switch P.C.B.
- Iris P.C.B.

For more details, See Fig. S3-2 ~ S3-4.

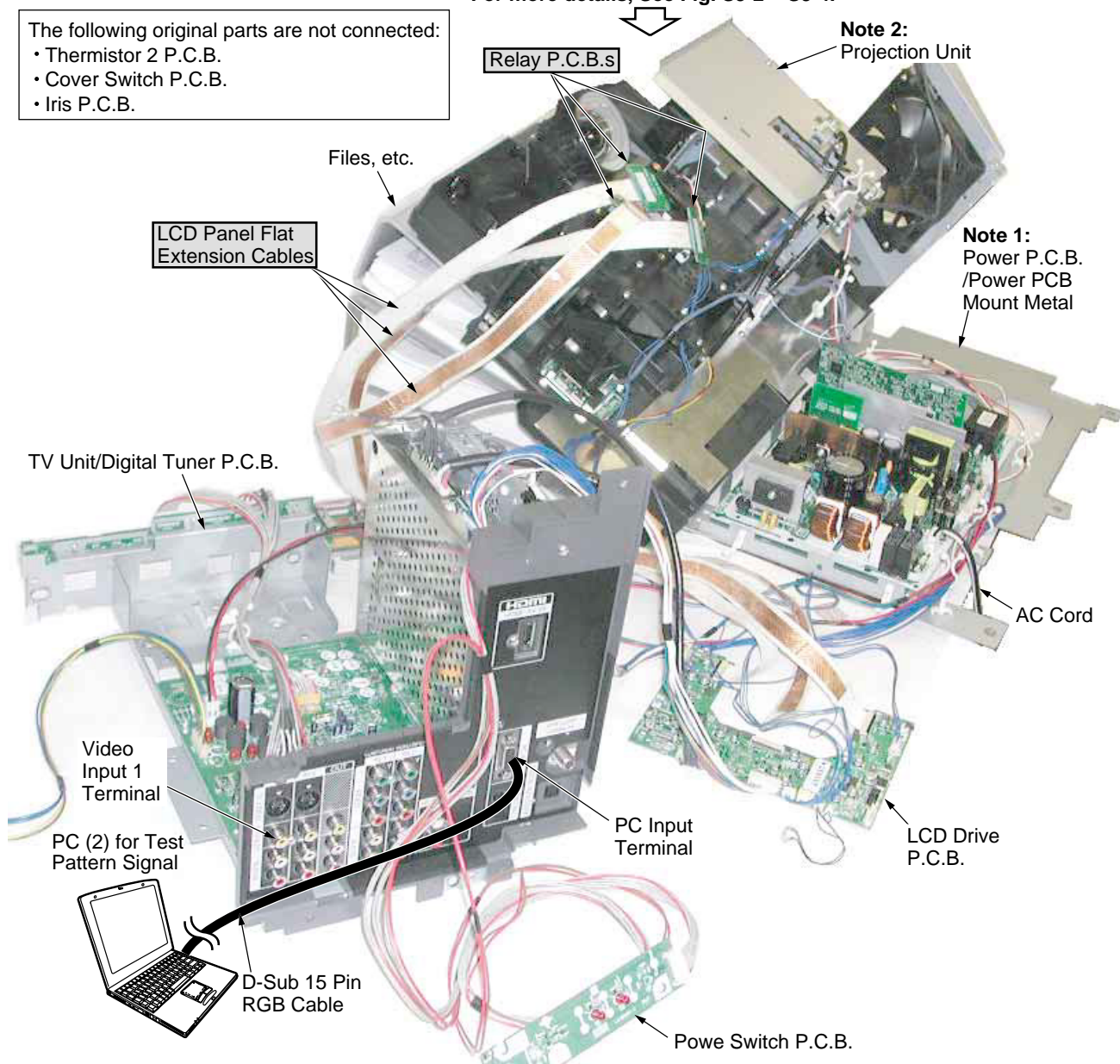
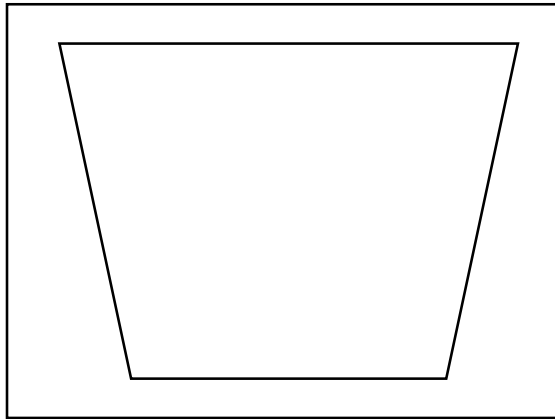
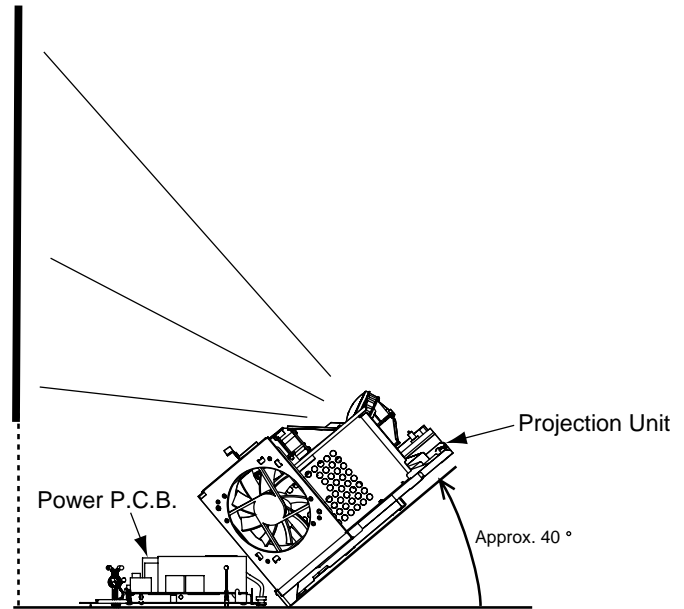


Fig. S3-1

Note for Service Position (3):

1. To improve safety and serviceability, open the Power P.C.B./Power PCB Mount Metal by removing the 6 Screws.
2. Project the picture onto the white screen so that the picture is within the limits of the Screen as shown.

Mechanical Adjustment Setting**<White Screen>****<Side View>**

Detailed View for Service Position (2)

Note:

Take care not to apply excessive pressure to the LCD Panel Flexible Cables when servicing.

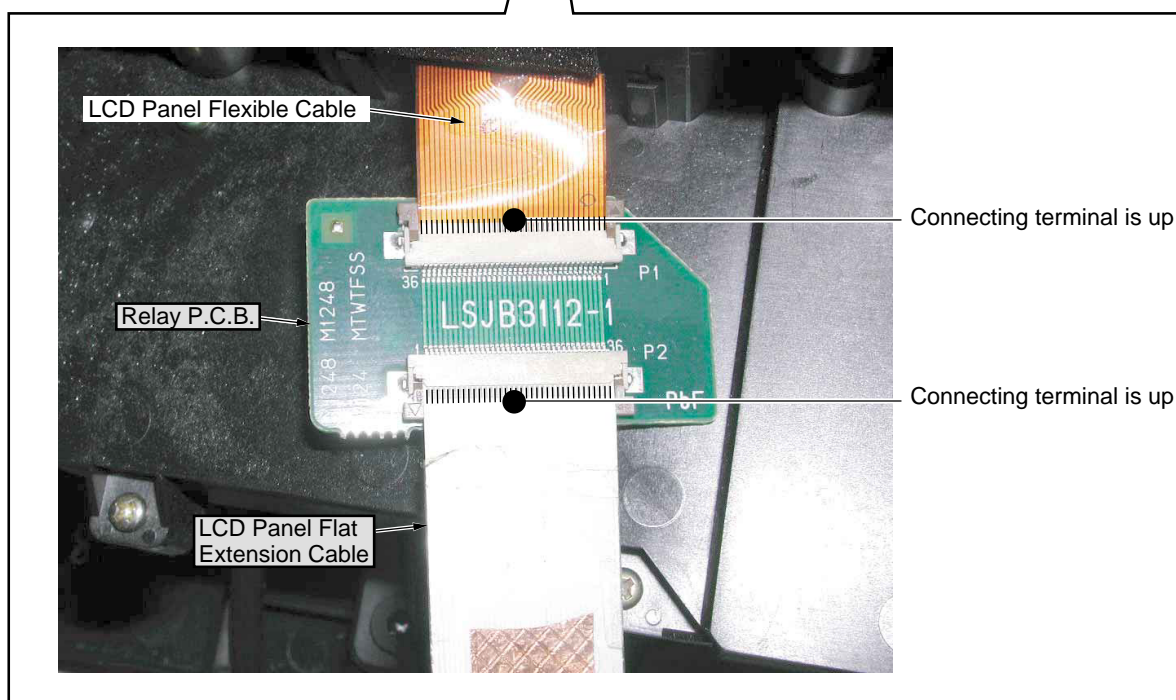
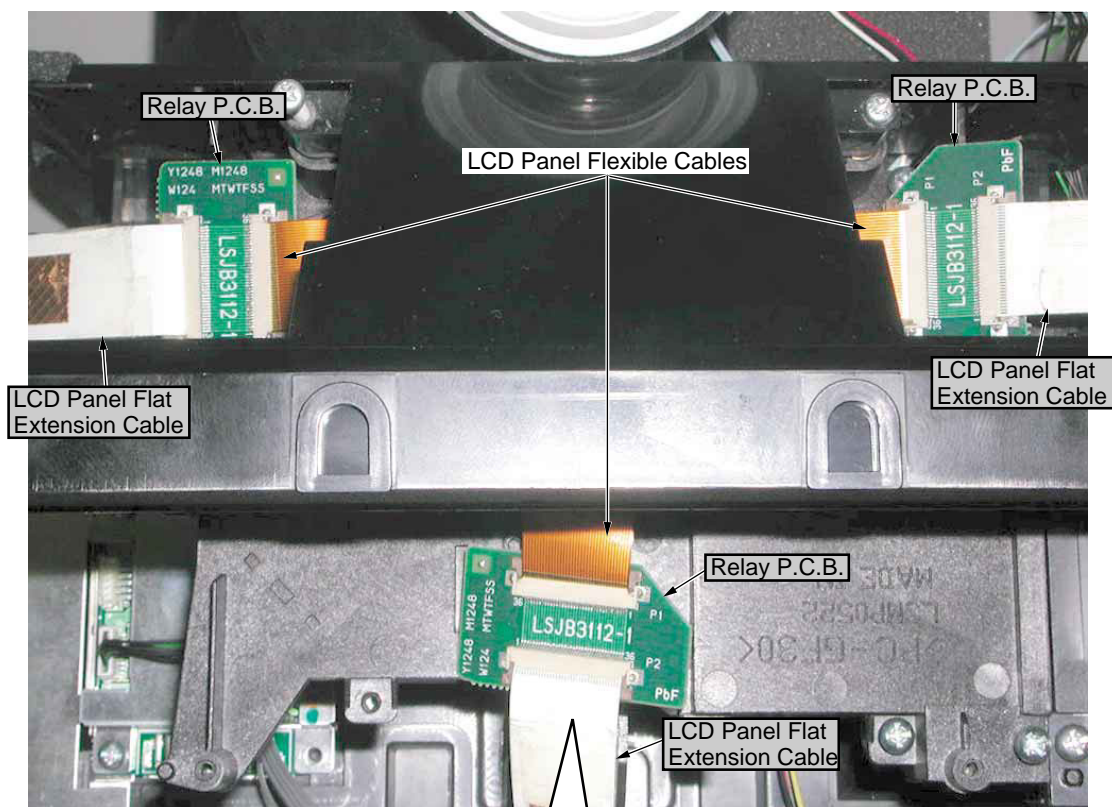


Fig. S3-2

Detailed View for Service Position (2)

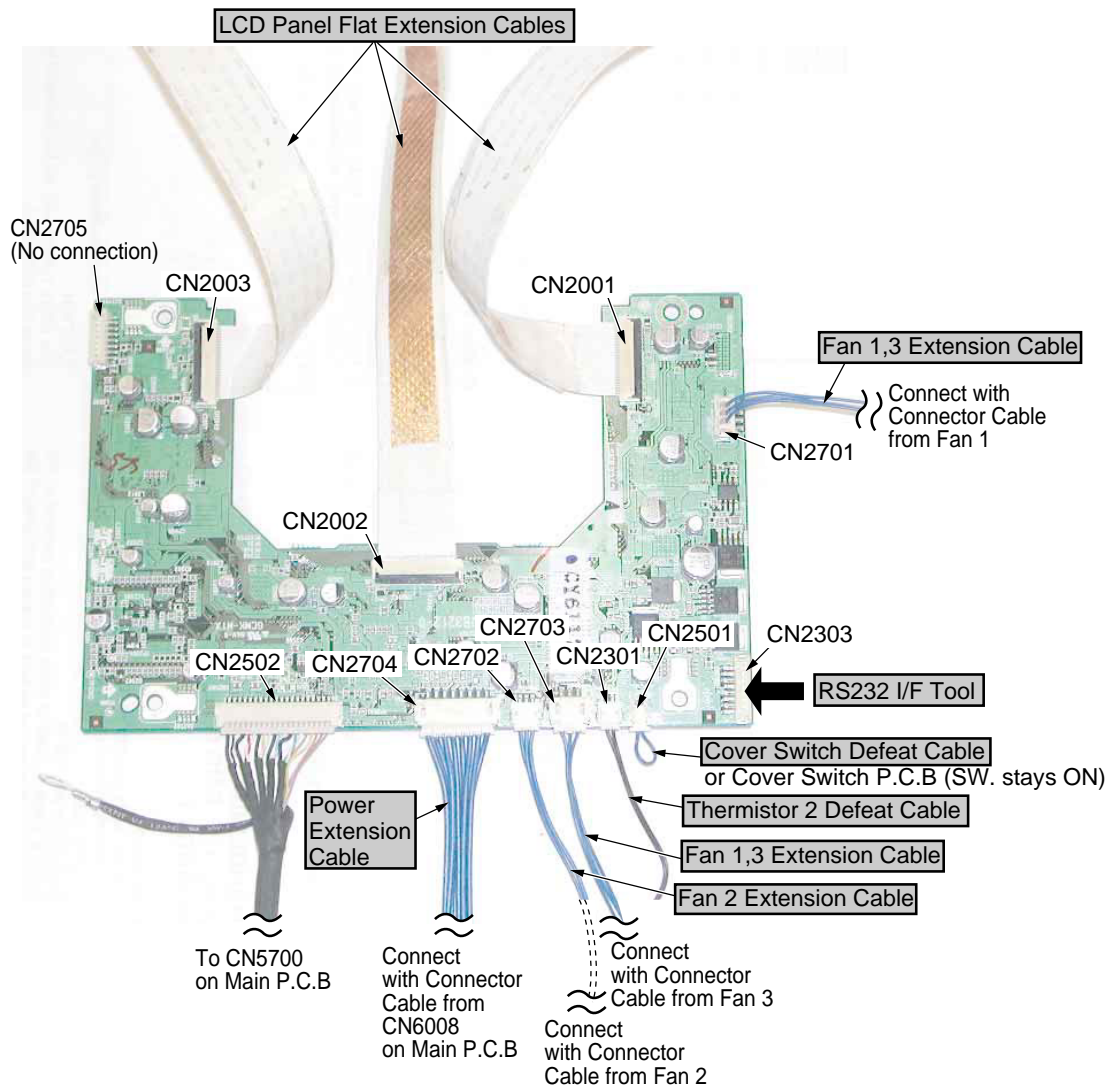


Fig. S3-3

Note:

Because of disconnecting Connector CN2705, Iris function does not work in this position.

Detailed View for Service Position (2)

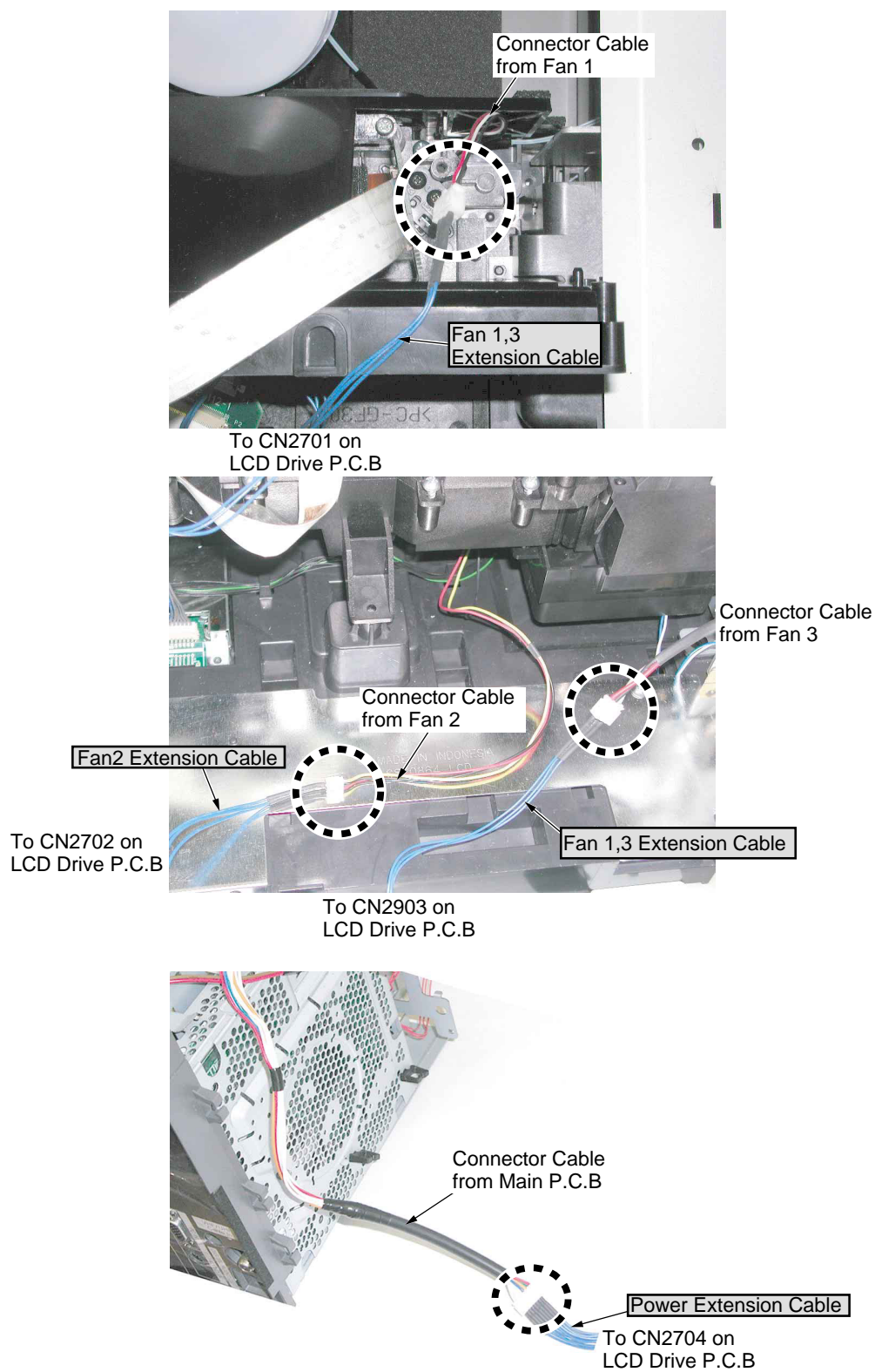


Fig. S3-4

8.3. Replacement Procedures for CSP (Chip Size Package) IC

IC Location

Make sure to install IC in the correct position on the P.C.B. as shown.

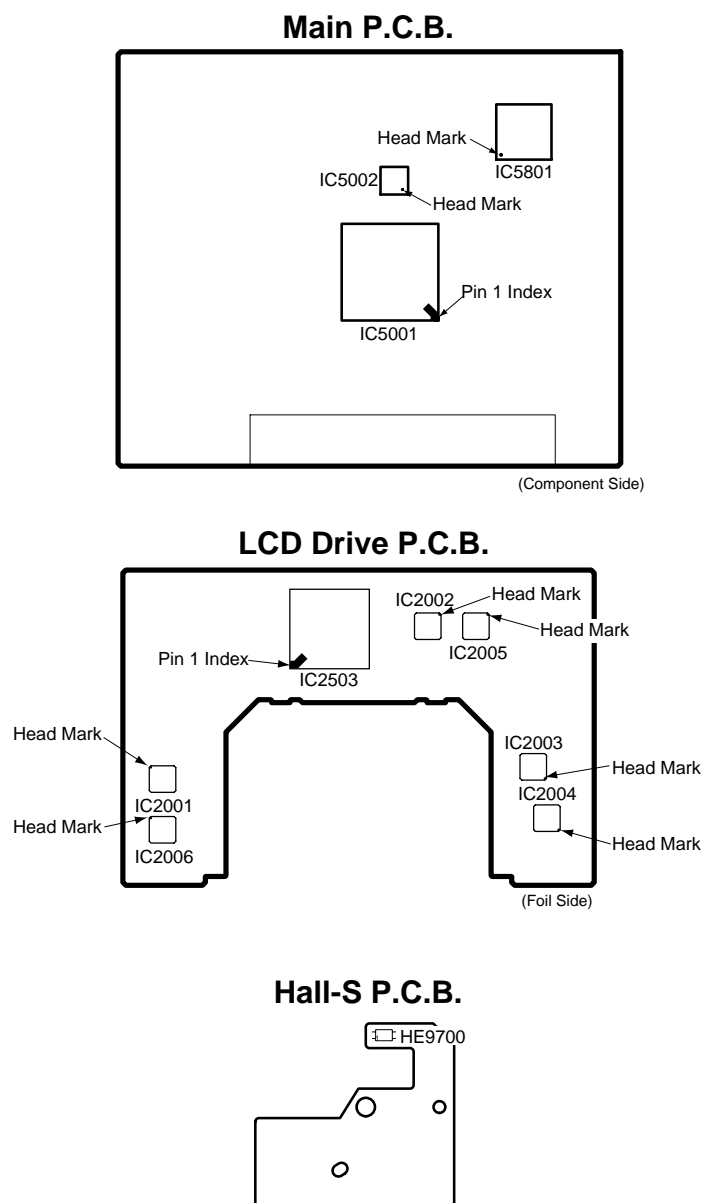
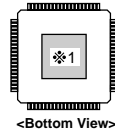


Fig. 10-1

Temperature Profile for Heat Resistance of CSP IC

- IC2001~IC2006 on the LCD Drive P.C.B.

The area as indicated with *1 is connected with the LCD Drive C.B.A. with solder for conductive heat sink.



(IC Removal hint)

- Use the Blower (heat up) from the top to remove.

(IC Installation hint)

- Solder the *1 area of IC.

If can not solder, make the solder remained on PC board where *1 area is connected with as flat as possible.

TEMPERATURE PROFILE FOR HEAT RESISTANCE OF THIS IC

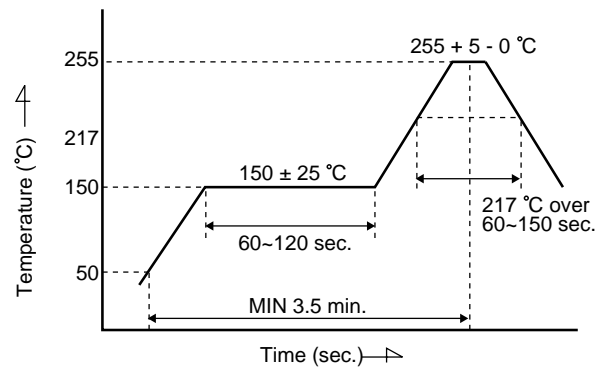
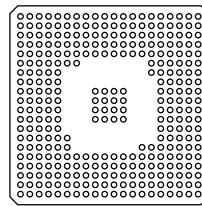


Fig. 10-2

- IC2503 (CSP IC) on the LCD Drive P.C.B.



TEMPERATURE PROFILE FOR HEAT RESISTANCE OF THIS IC

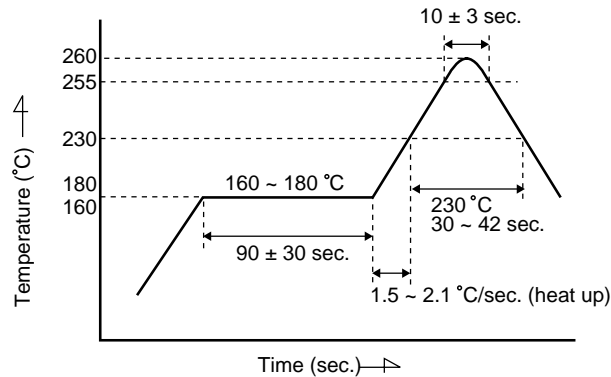
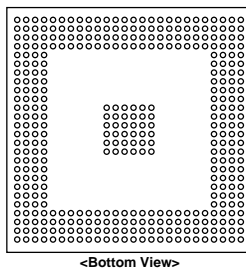


Fig. 10-3

- IC5001 (CSP IC) on the Main P.C.B.



TEMPERATURE PROFILE FOR HEAT RESISTANCE OF THIS IC

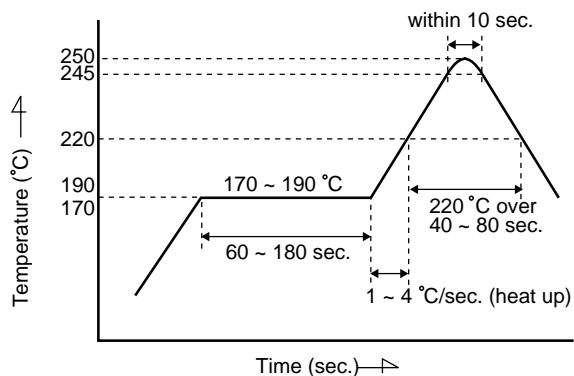
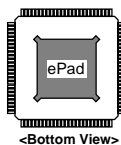


Fig. 10-4

- IC5801 on the Main P.C.B.

The ePad of this IC, located on the bottom of the IC, is connected on the Main C.B.A. with solder.



(IC Removal hint)

- Use the Blower (heat up) from the top to remove.

Note:

This IC (HDMI IC) which was removed must be disposed of.

(IC Installation hint)

- It is necessary to connect the ePad area with the solder.

TEMPERATURE PROFILE FOR HEAT RESISTANCE OF THIS IC

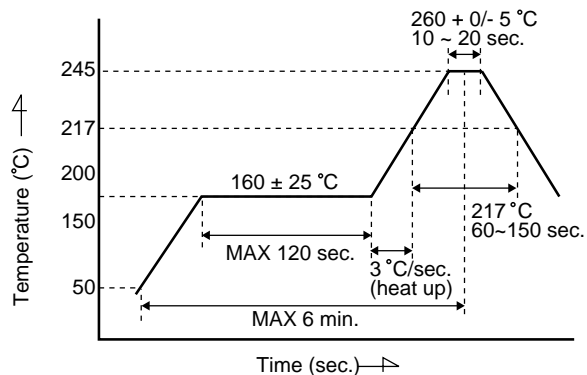


Fig. 10-5

- IC5002 on the Main P.C.B.



<Bottom View>

TEMPERATURE PROFILE FOR HEAT RESISTANCE OF THIS IC

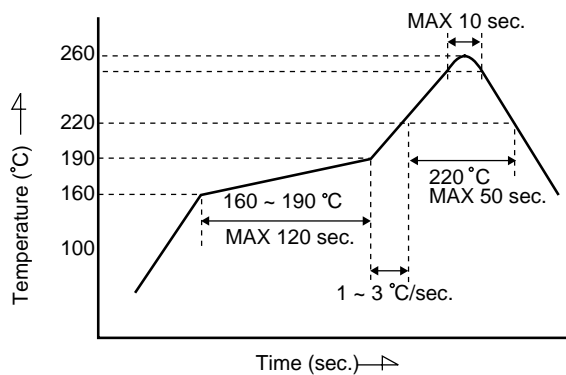


Fig. 10-6

- HE9700 (Hall IC) on the Hall-S P.C.B.



TEMPERATURE PROFILE FOR HEAT RESISTANCE OF THIS IC

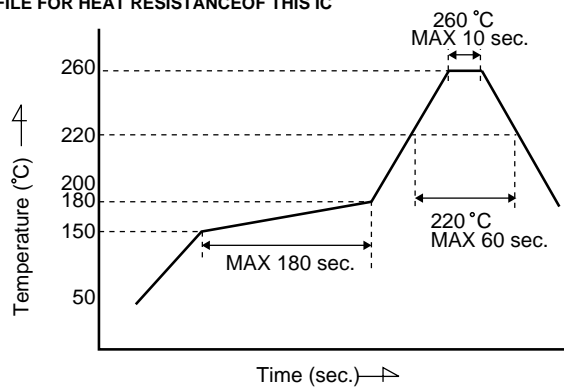


Fig. 10-7

9 Disassembly and Assembly Instructions

9.1. Cabinet Section

DISASSEMBLY METHOD OF CABINET SECTION

Cabinet section contains following removal procedures:

REMOVAL OF THE TV UNIT AND THE DIGITAL TUNER P.C.B. FROM THE CABINET

REMOVAL OF THE PROJECTION UNIT

REMOVAL OF THE BASE BODY UNIT

REMOVAL OF THE POWER P.C.B. FROM THE CABINET

REMOVAL OF THE FRONT JACK/OPERATION P.C.B., THE SD CARD P.C.B., THE MAIN P.C.B., THE BASE P.C.B. FROM THE TV UNIT

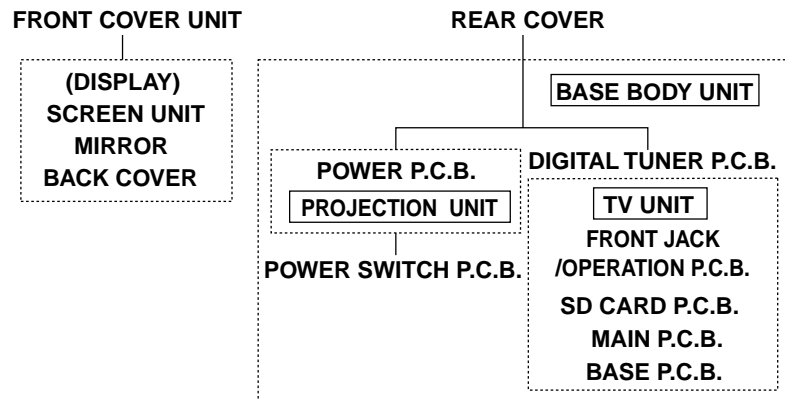
REMOVAL OF THE SCREEN UNIT FROM THE DISPLAY

REMOVAL OF THE MIRROR FROM THE BACK COVER

REMOVAL OF THE POWER SWITCH P.C.B. FROM THE CABINET

DISASSEMBLY FLOWCHART

This flow chart indicates the disassembly steps of the cabinet parts and the P.C.Boards in order to gain access to item (s) to be serviced. When reassembling, perform the step (s) in the reverse order. Bend, route and dress the wires as they were originally.



Note :

- Place a cloth or some other soft material under the P.C. Boards or Unit to prevent damage.
- When reinstalling, ensure that the connectors are connected firmly and electrical components have not been damaged.
- Do not supply power to the unit during disassembly and reassembly.

REMOVAL OF THE TV UNIT AND THE DIGITAL TUNER P.C.B. FROM THE CABINET

1. Remove the Rear Cover Unit by removing the 13 Screws (401) then pinching the 3 latch tabs.

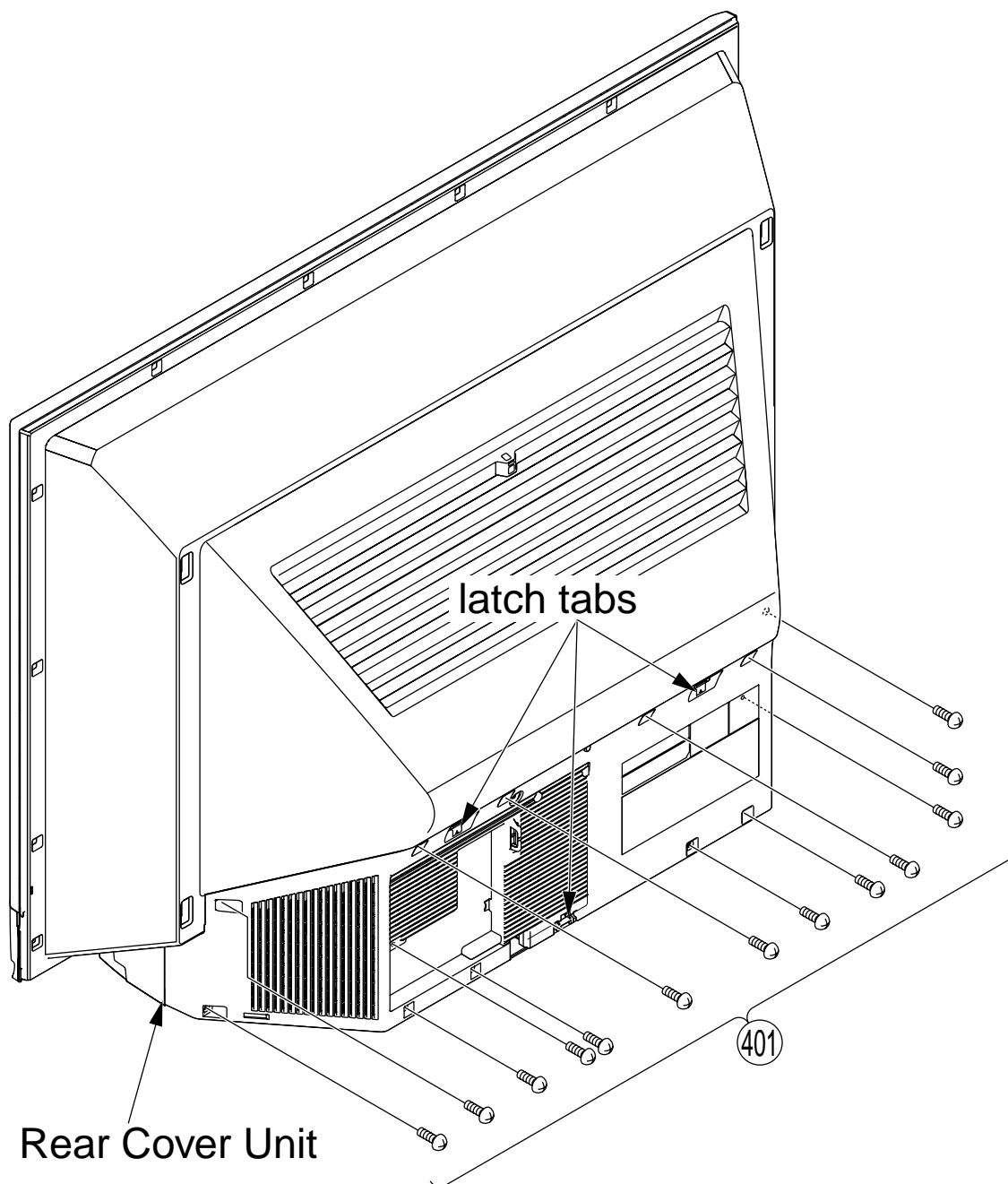


Fig. D1-1

2. Remove the Connecting Plate R by removing the 2 Screws (401, 402).
3. 1) Remove the 2 Screws (402) on the Connecting Plate F, and remove the Screw (401) on the left side of the TV Unit.
2) Disconnect Connectors CN4501, CN6000, CN6001, CN6002, CN6008 and the 2 Speaker Connectors and release from the clampers.
- 3) To access the GND Wire of the LVDS Cable, slide the TV Unit with the Digital Tuner P.C.B. along the Guide Tabs.
- 4) Remove the Screw (402) on GND Wire of LVDS Cable, and disconnect the LVDS Cable from Connector CN5700.
- Note:** refer to next page.
- 5) Remove the TV Unit with the Digital Tuner P.C.B.

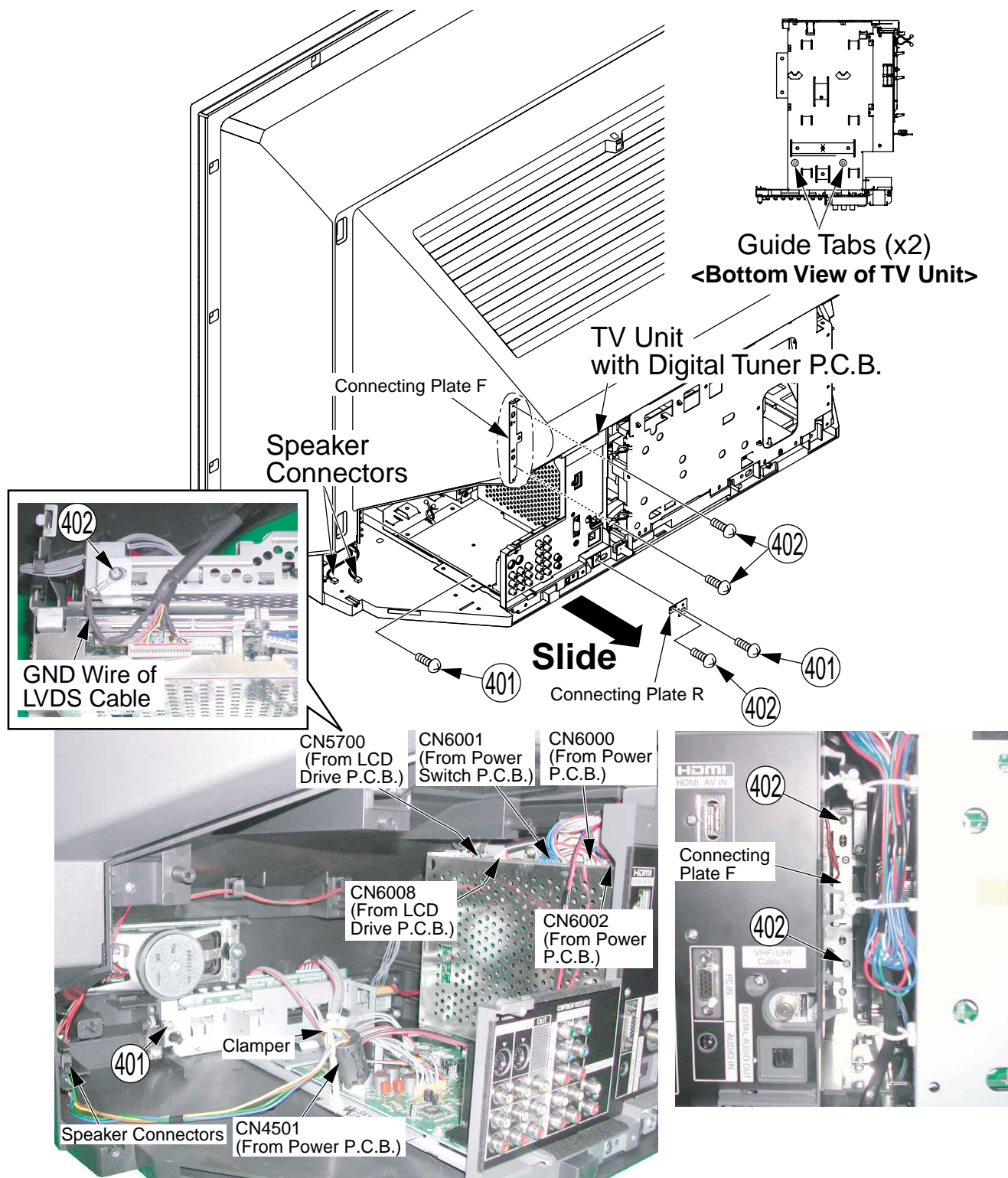
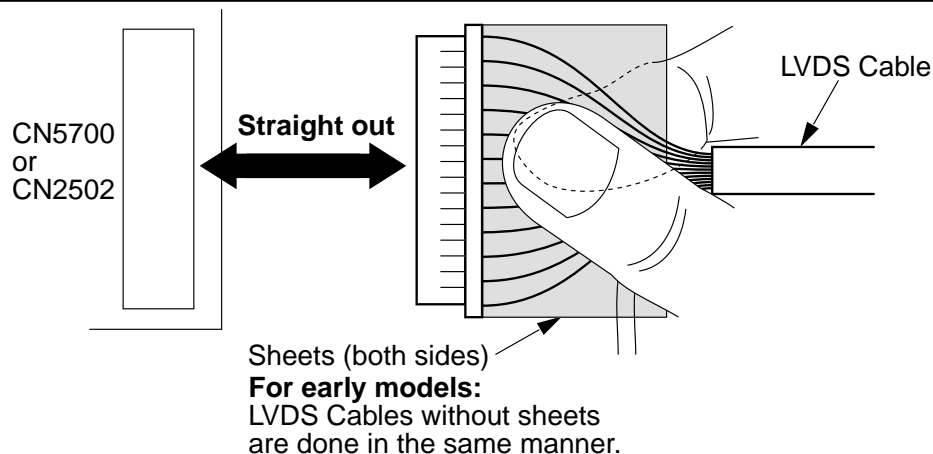


Fig. D1-2

Note:

Grasping the center of both sides of the sheet or cable with your fingers, slowly and steadily pull the LVDS Cable straight out from the connector. Do not joggle the LVDS cable while disconnecting. Reconnecting is done in the same manner.



4. 1) Disconnect Connector DT10.
- 2) Remove the Digital Tuner P.C.B. by removing the 6 Screws (402, 480). (BtoB Connector DT12 is disconnected.)

Note:

If the Digital Tuner P.C.B. is difficult to remove, remove the Rear Jack Holder by removing the 6 (or 7: PT-52/56LCX16, PT-52/61LCX66-K, PT-56LCX15-K) Screws (402, 452) and releasing the Locking Tab.

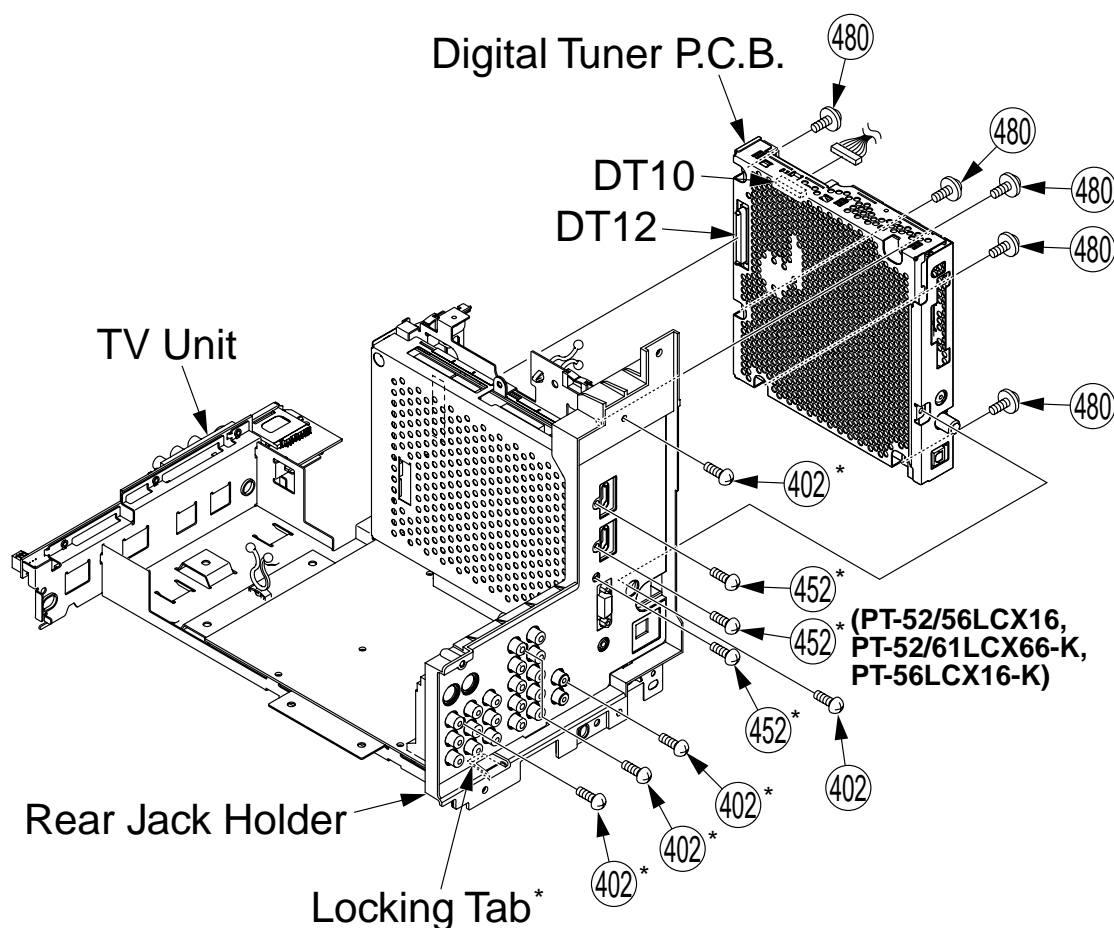


Fig. D1-3

REMOVAL OF THE PROJECTION UNIT

1. Remove the TV Unit with the Digital Tuner P.C.B. Refer to Steps 1 ~ 2 in "REMOVAL OF THE TV UNIT AND THE DIGITAL TUNER P.C.B. FROM THE CABINET."
2. 1) Remove the 2 Screws (402) on the Connecting Plate F.
2) Remove the 4 Screws (401) on the Projection Unit.
3) Slide the Projection Unit along the Groove.

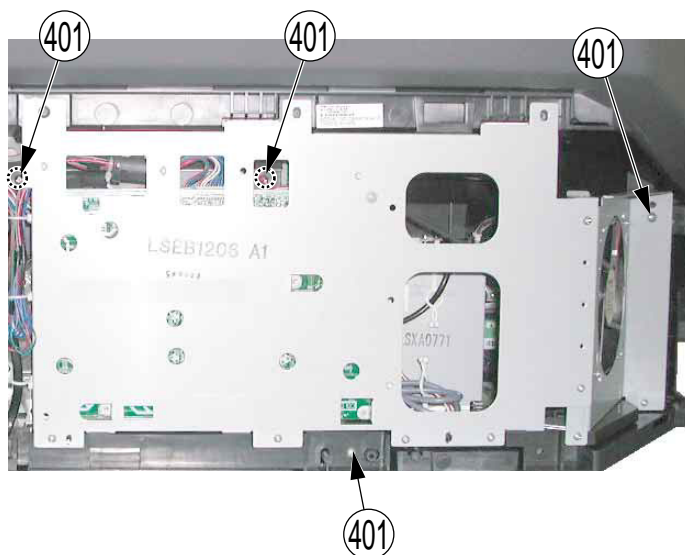
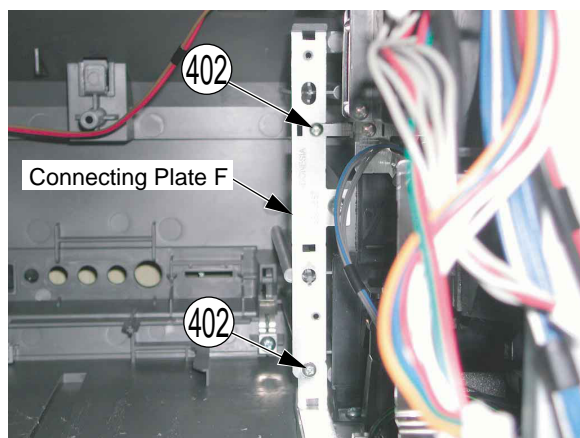
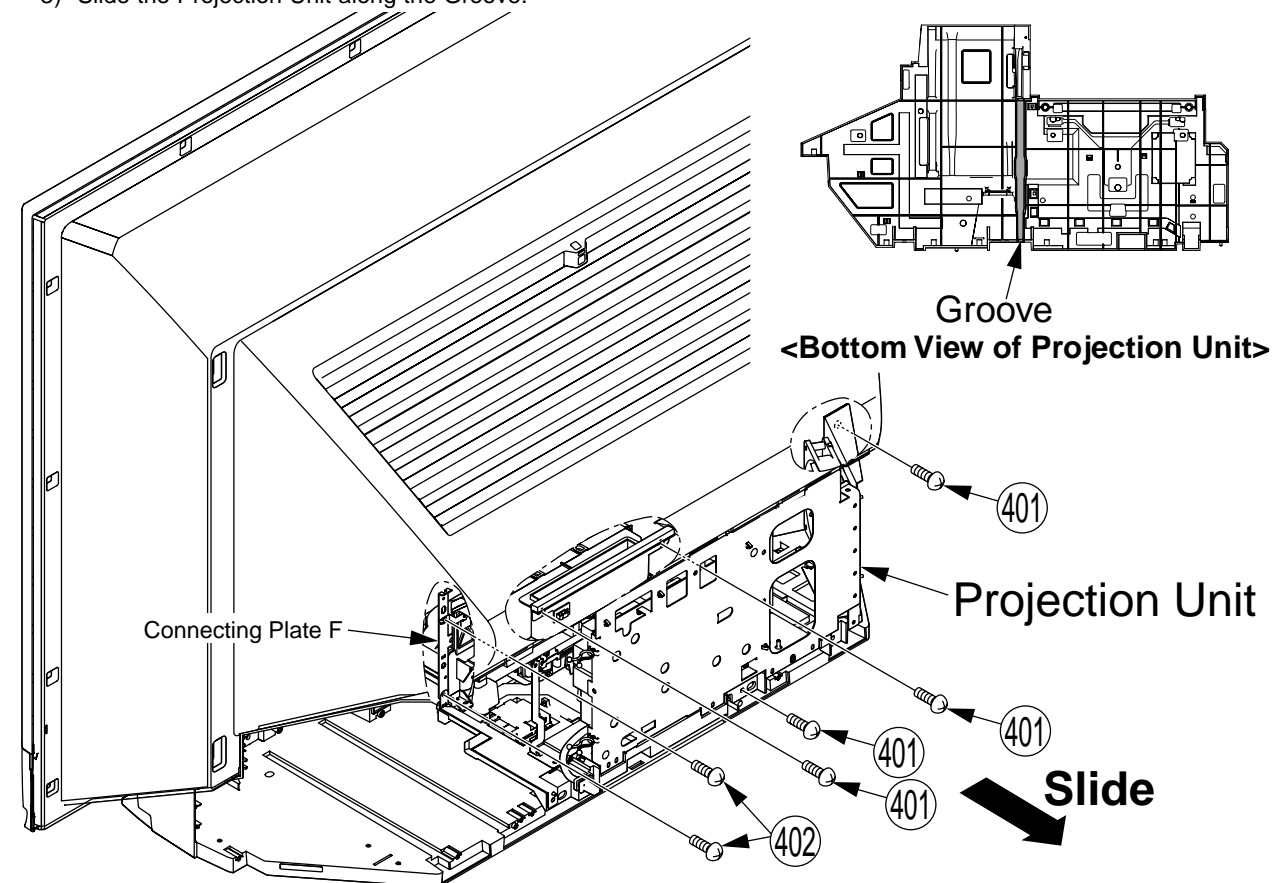


Fig. D2-1

3. 1) Remove the Top Duct 3 Unit by removing the 4 Screws (421).

CAUTION:

When removing the Screws (421) on the Top Duct 3 Unit, plastic dust may be produced. Therefore, confirm that there is no dust on the Top Duct 3 Unit. If there is dust, clean the Top Duct 3 Unit with a brush, etc. Otherwise, dust may adhere to the inside of the screen.

- 2) Remove the Lamp Unit by turning the Knob.

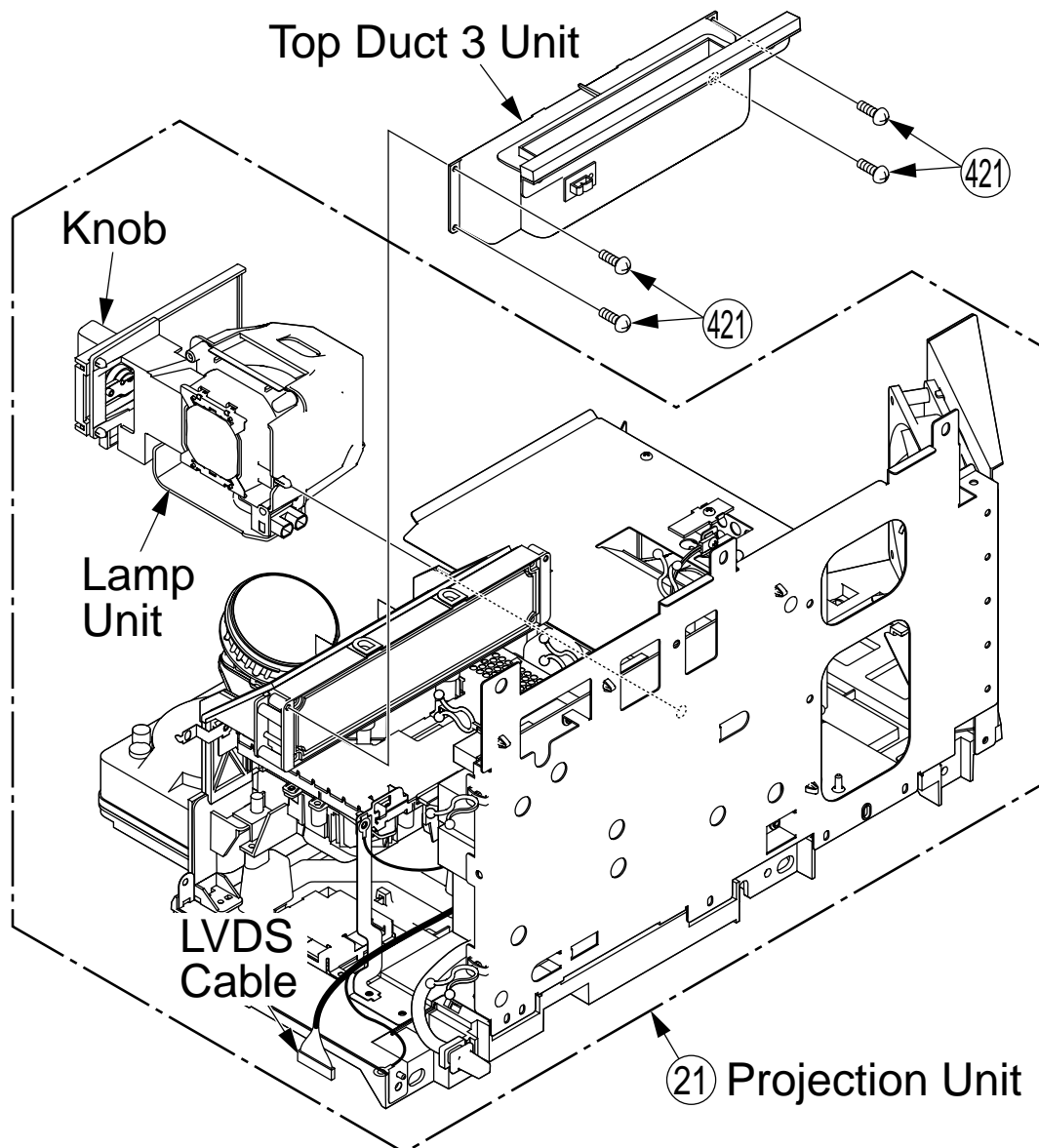


Fig. D2-2

Replacement Note of Projection Unit:

1. After replacing the Projection Unit, be sure to perform "ADJUSTMENT of Projection Unit." Refer to "WHEN INSTALLING THE PROJECTION UNIT OR THE BASE BODY UNIT INTO THE UNIT AT THE USER'S LOCATION:."
2. These parts will be necessary when replacing. Set aside, keep, and re-use.
 - Top Duct 3 Unit
 - Lamp Unit

REMOVAL OF THE BASE BODY UNIT

1. Remove the Rear Cover Unit. Refer to Step 1 in "REMOVAL OF THE TV UNIT AND THE DIGITAL TUNER P.C.B. FROM THE CABINET."
2. 1) Remove the Front Cover Unit from the latches.
2) Remove the 5 Screws (454) from front side, and remove the Display.

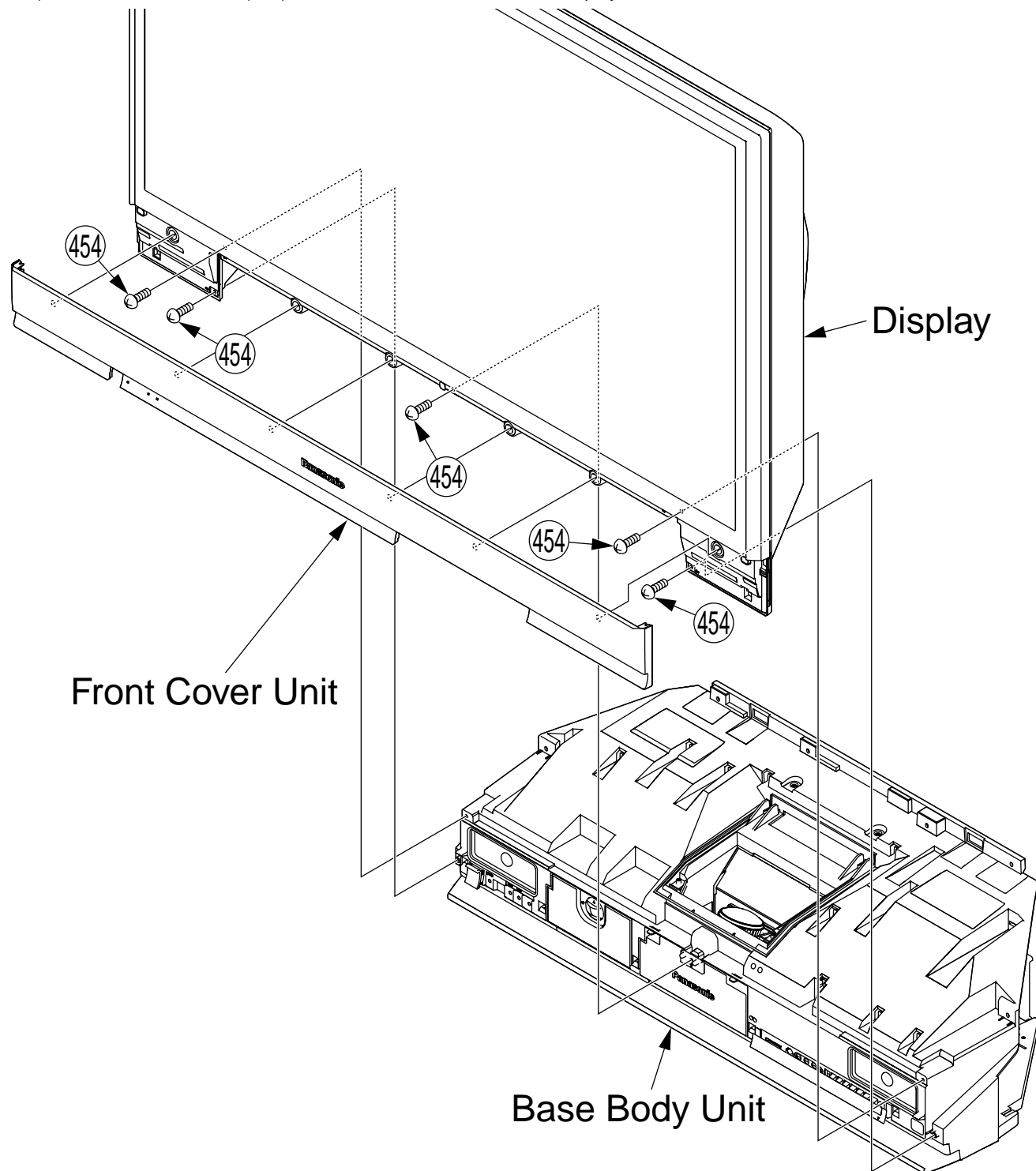


Fig. D3

Replacement Note:

After replacing the Base Body Unit, be sure to perform "ADJUSTMENT of Projection Unit." Refer to "WHEN INSTALLING THE PROJECTION UNIT OR THE BASE BODY UNIT INTO THE UNIT AT THE USER'S LOCATION:."

REMOVAL OF THE POWER P.C.B. FROM THE CABINET

1. Remove the Rear Cover Unit. Refer to Step 1 in "REMOVAL OF THE TV UNIT AND THE DIGITAL TUNER P.C.B. FROM THE CABINET."
2. 1) Open the Power P.C.B./Power PCB Mount Metal by removing the 6 Screws (402, 421).
2) Disconnect Connectors CN1522, CN1514, CN1516, CN1520 (Thermal Fuse) and release from the clampers.
3. 1) Remove the Lamp Unit by turning the Knob from the front.
2) Disconnect the Lamp Connector by removing the 2 Screws (451).

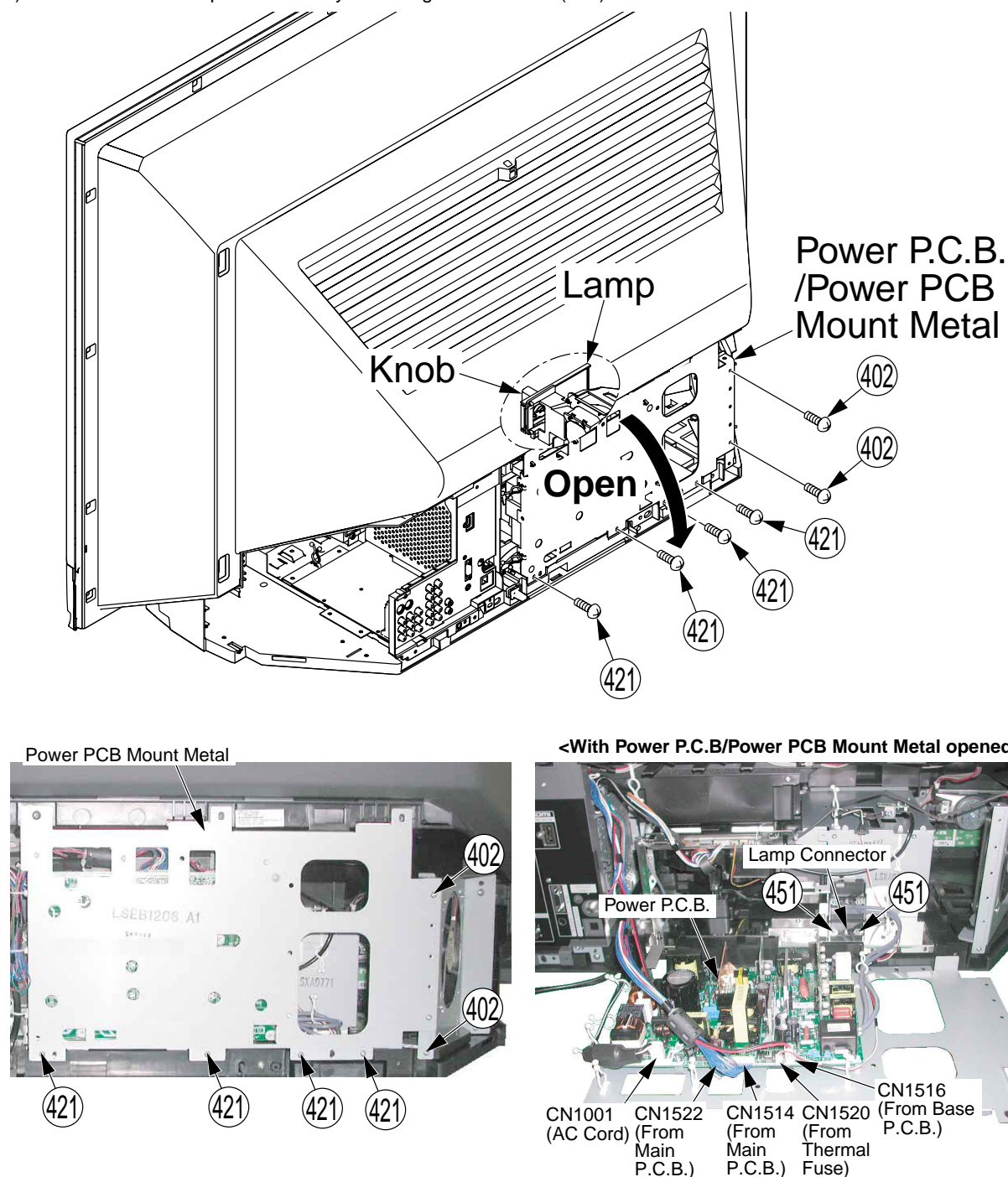


Fig. D4-1

Reassembly Note for Lamp:

After installing the Lamp Unit, confirm that the Lamp Unit will not come out by pulling on the Knob.

- 2) Remove the Power P.C.B. by removing the 5 Screws (479) and release from the spacer.

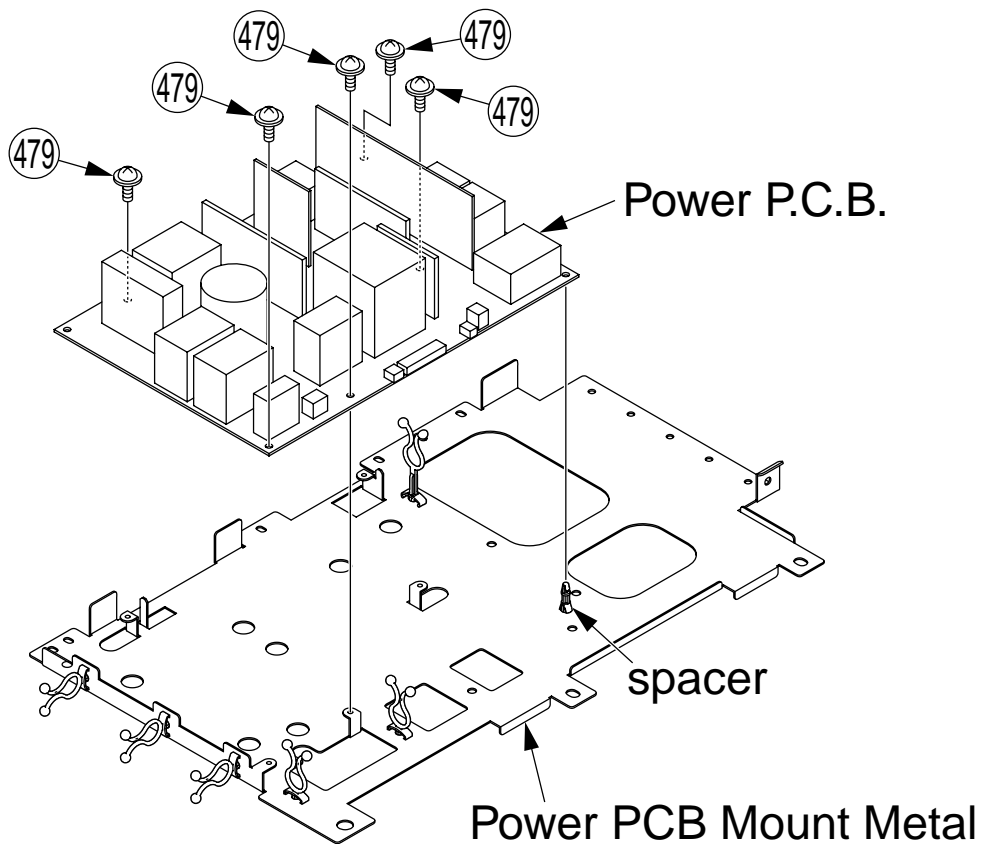
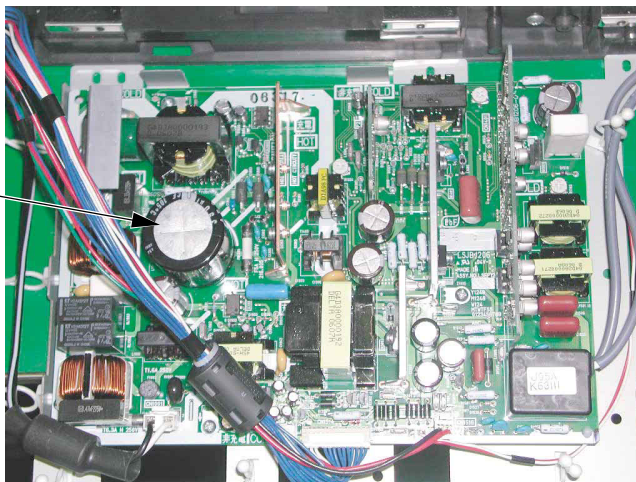


Fig. D4-2

CAUTION:

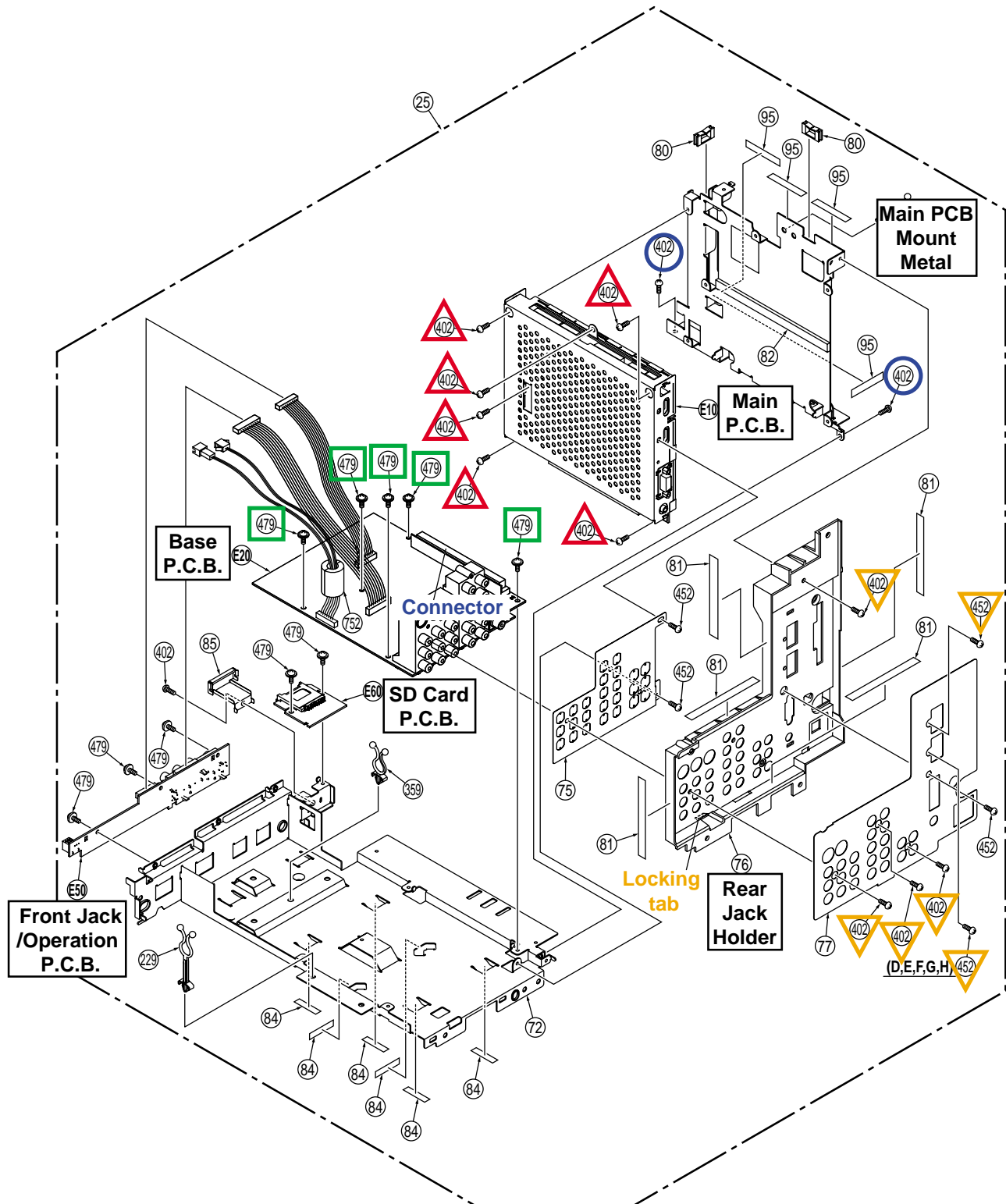
High voltage exists on the Power P.C.B. While removing Power P.C.B., do not touch any parts on the board. Hold the edge of the board when removing it.

C1810:
High voltage
generated.
(approx. 400 V)



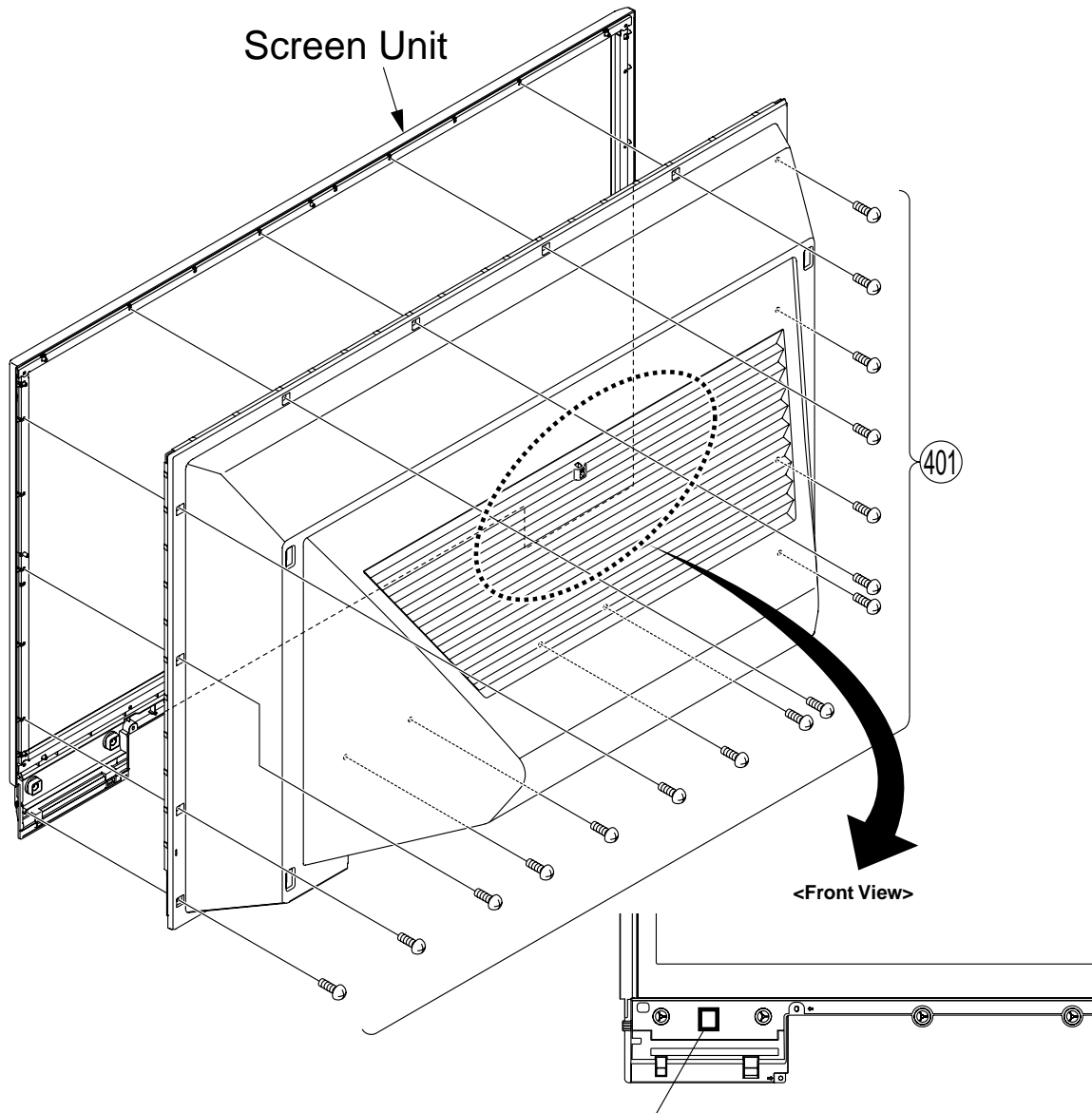
REMOVAL OF THE FRONT JACK/OPERATION P.C.B., THE SD CARD P.C.B., THE MAIN P.C.B., THE BASE P.C.B. FROM THE TV UNIT

1. Remove the TV Unit. Refer to Steps 1 ~ 4 in "REMOVAL OF THE TV UNIT AND THE DIGITAL TUNER P.C.B. FROM THE CABINET."
2. Remove the Rear Jack Holder by removing the screws and releasing Locking tab ("▽" mark).
3. Remove the Main P.C.B. and the Main PCB Mount Metal together by removing the screws ("○" mark) and the connector. Then remove the Main P.C.B. by removing the screws ("△" mark).
4. Remove the Base P.C.B. by removing the screws ("□" mark).



REMOVAL OF THE SCREEN UNIT FROM THE DISPLAY

- 1. Remove the Display. Refer to Steps 1 ~ 2 in "REMOVAL OF THE BASE BODY UNIT."
- 2. Remove the Screen Unit by removing the 16 Screws (401).



See label on the 56 inch Screen Unit.



label		
Screen Unit	by TOPPAN	by KURARAY
PT-56LCX66	LSYK1871	LSYK1888
PT-56LCX16-K	LSYK1872	LSYK1889

Fig. D5-1

Replacement Note for 56 inch Screen Unit:
Because there are two types of 56 inch Screen Unit, a label (T or K) is indicated on the Screen Unit.
When servicing a 56 inch Screen Unit, remove the Front Cover Unit and confirm the label on the unit. Then, order the correct parts according to the above chart.

(PT-56LCX66)
Screen Unit (LSYK1871) is compatible with the Screen Unit (LSYK1888) as a unit.

(PT-56LCX16/PT-56LCX16-K)
Screen Unit (LSYK1872) is compatible with the Screen Unit (LSYK1889) as a unit.

3. Remove the 2 Screen Angle H Units and the 2 Screen Angle V Units by removing the 14 Screws (465), and remove the Fresnel Lens and the Lenticular Screen.

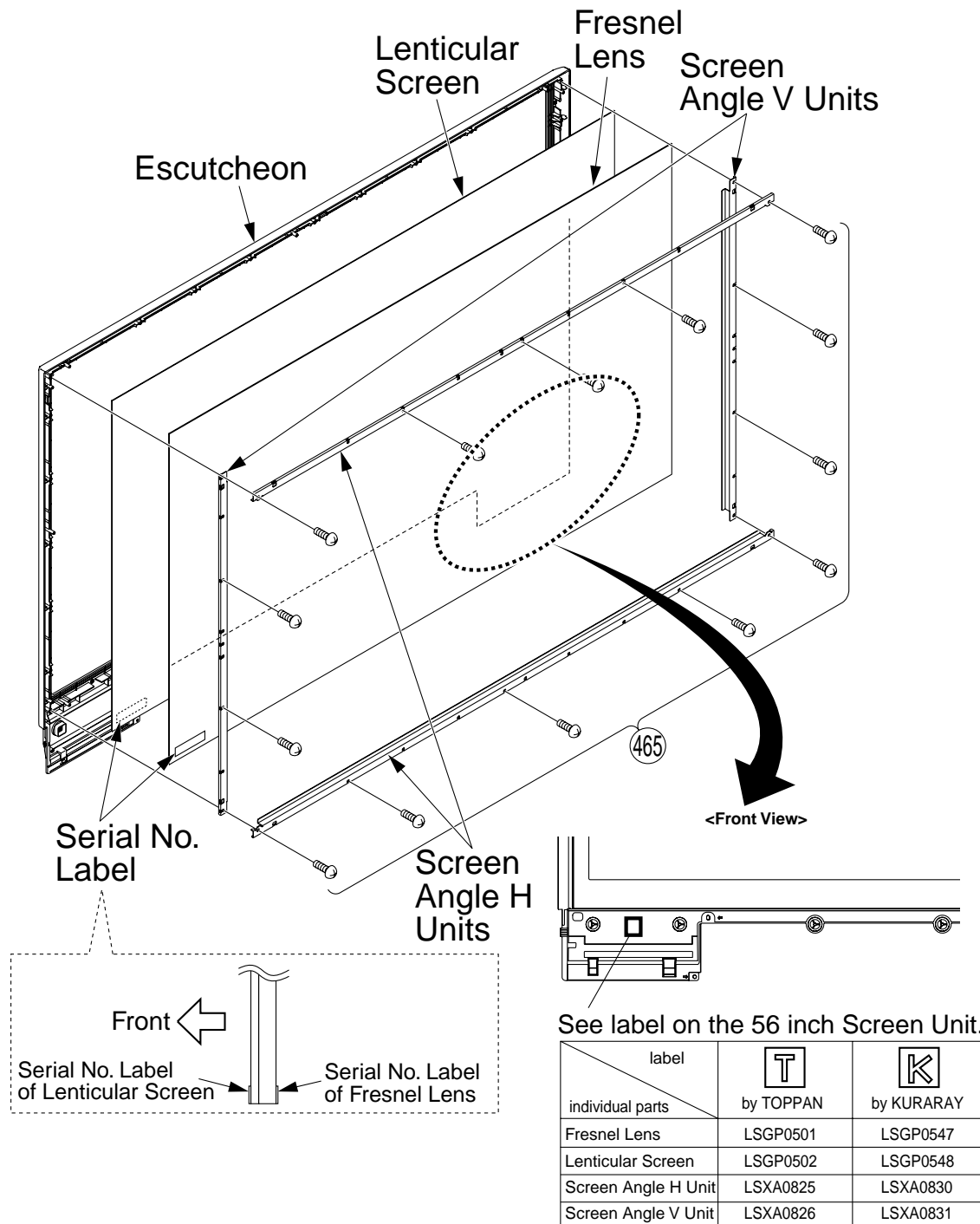


Fig. D5-2

Replacement Note for all Screen Units:

When replacing the Fresnel Lens and the Lenticular Screen, it is imperative that dust, etc., does not adhere between the Fresnel Lens and the Lenticular Screen. Due to this risk, it is strongly recommended to replace the Screen Unit as a unit.

Replacement Note for 56 inch Screen Unit:

Because there are two types of 56 inch Screen Units and individual parts contained in the Screen Unit are not compatible, a label (T or K) is indicated on the Screen Unit.

When servicing individual parts of a 56 inch Screen Unit, remove the Front Cover Unit and confirm the label on the Screen Unit. Then, order the correct parts according to the above chart.

REMOVAL OF THE MIRROR FROM THE BACK COVER

1. Remove the Screen Unit. Refer to Steps 1 ~ 2 in "REMOVAL OF THE SCREEN UNIT FROM THE DISPLAY."
2. **(For 52 inch models)**
 - 1) Remove the 2 Mirror Holder H Units and the 2 Mirror Holder V Units by removing the 8 Screws (401).
 - 2) Remove the Mirror from the top by releasing the Back Cover slots.

Note: The Mirror is fragile. Handle with extreme care.

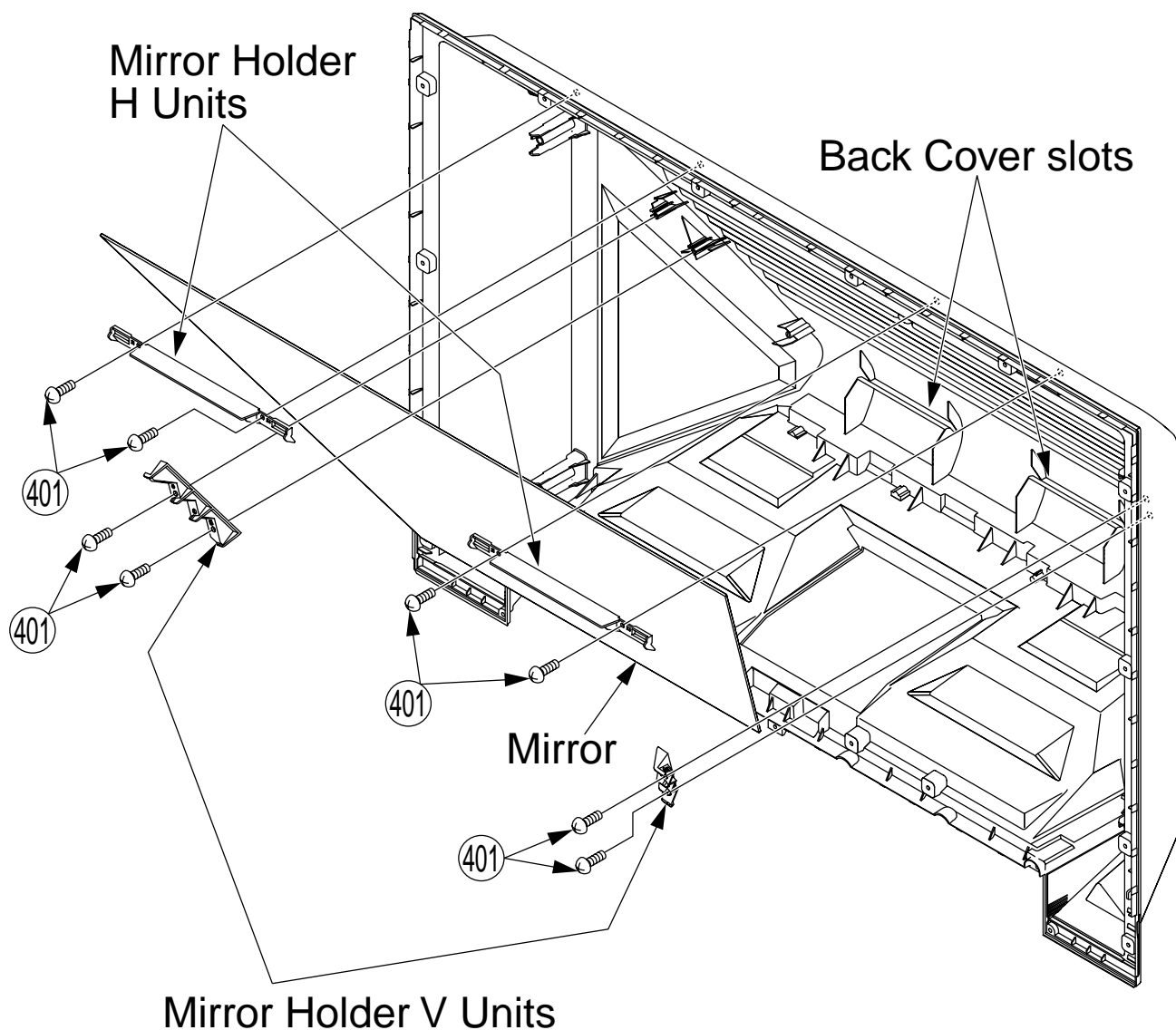


Fig. D6-1

Reassembly Notes for Mirror:

Install the Mirror using the following procedures:

- 1) Hold the edge of the Mirror, and insert the Mirror from the top into the Back Cover slots carefully.
When handling the Mirror, do not touch the Mirror surface.
- 2) Install the 2 Mirror Holder H Units and the 2 Mirror Holder V Units on the Mirror and tighten the 8 Screws (401).

(For 56/61 inch models)

- 1) Remove the 3 Mirror Holder H Units and the 2 Mirror Holder V Units by removing the 10 Screws (401).
- 2) Remove the Mirror from the top by releasing the Back Cover slots.

Note: The Mirror is fragile. Handle with extreme care.

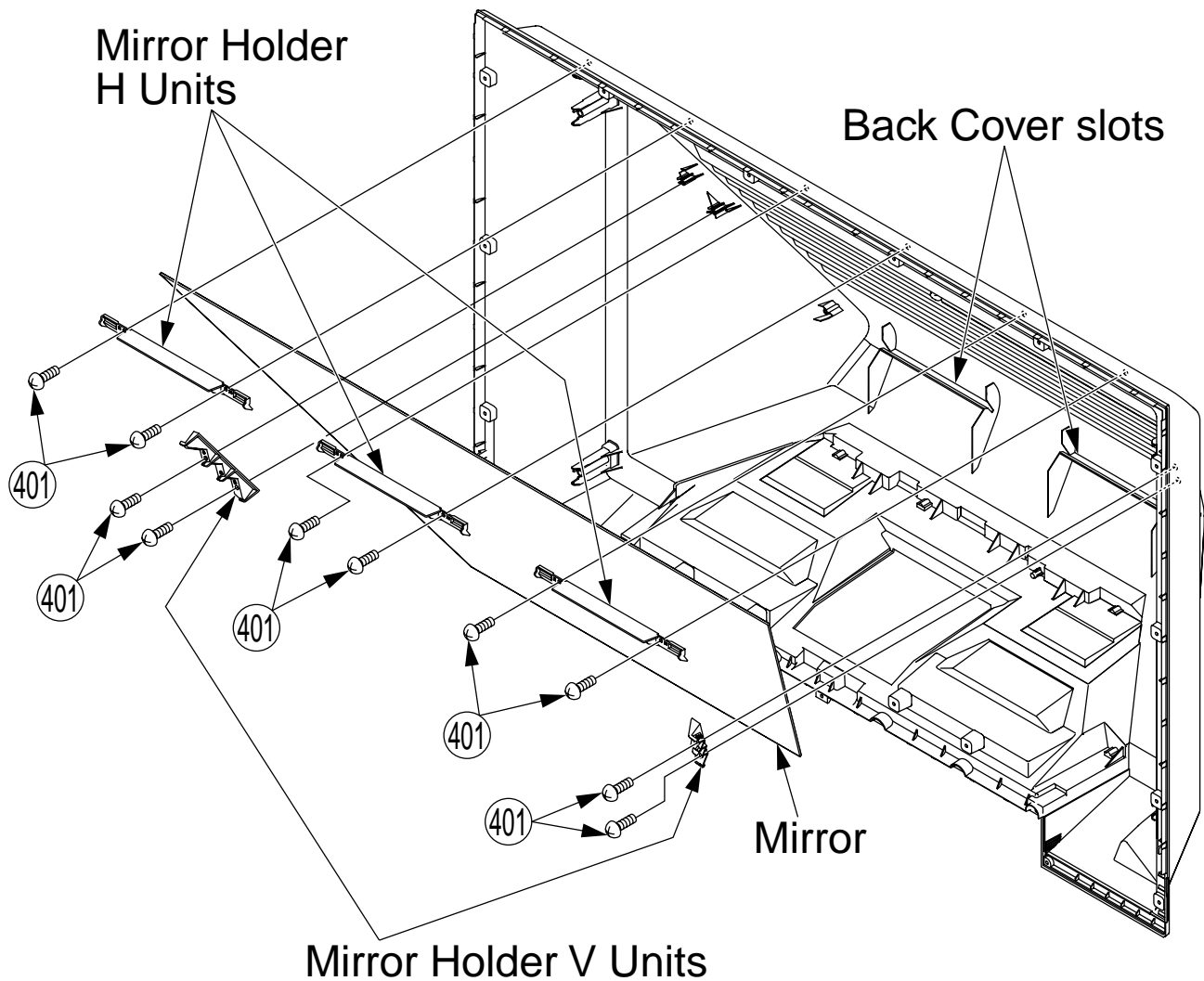


Fig. D6-2

Reassembly Notes for Mirror:

Install the Mirror using the following procedures:

- 1) Hold the edge of the Mirror, and insert the Mirror from the top into the Back Cover slots carefully.
When handling the Mirror, do not touch the Mirror surface.
- 2) Install the 3 Mirror Holder H Units and the 2 Mirror Holder V Units on the Mirror and tighten the 10 Screws (401).

REMOVAL OF THE POWER SWITCH P.C.B. FROM THE CABINET

1. Remove the Rear Cover Unit. Refer to Step 1 in "REMOVAL OF THE TV UNIT AND THE DIGITAL TUNER P.C.B. FROM THE CABINET."
2. 1) Remove the 2 Screws (465) and disconnect Connector CN6801.
2) Remove the Power Switch P.C.B. from the rear.

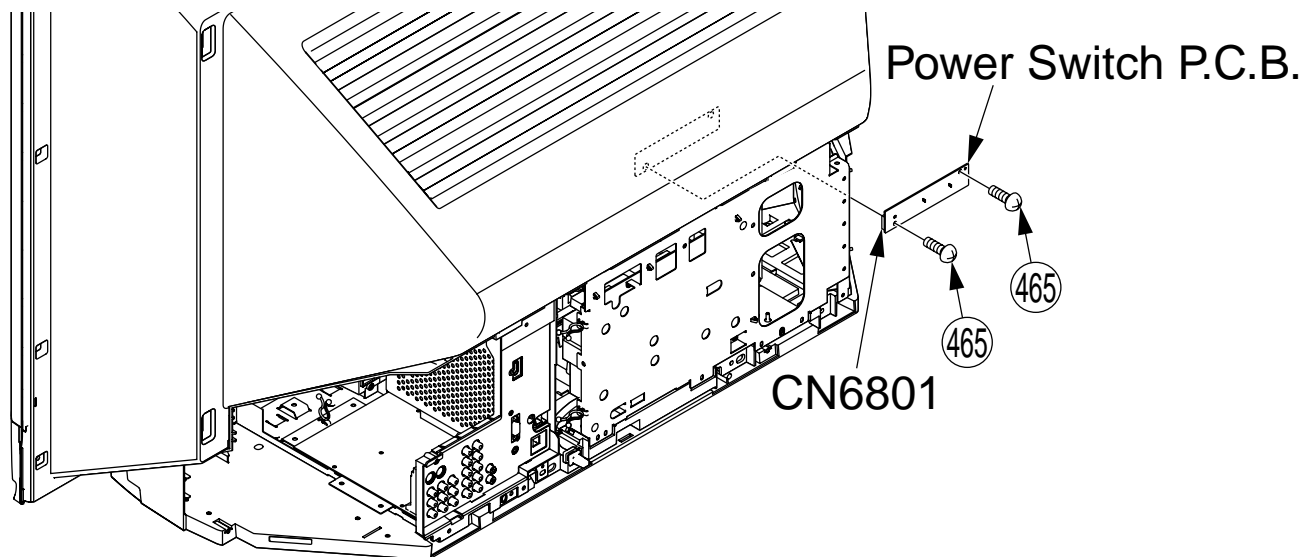


Fig. D7

9.2. Projection Section

DISASSEMBLY METHOD FOR PROJECTION UNIT

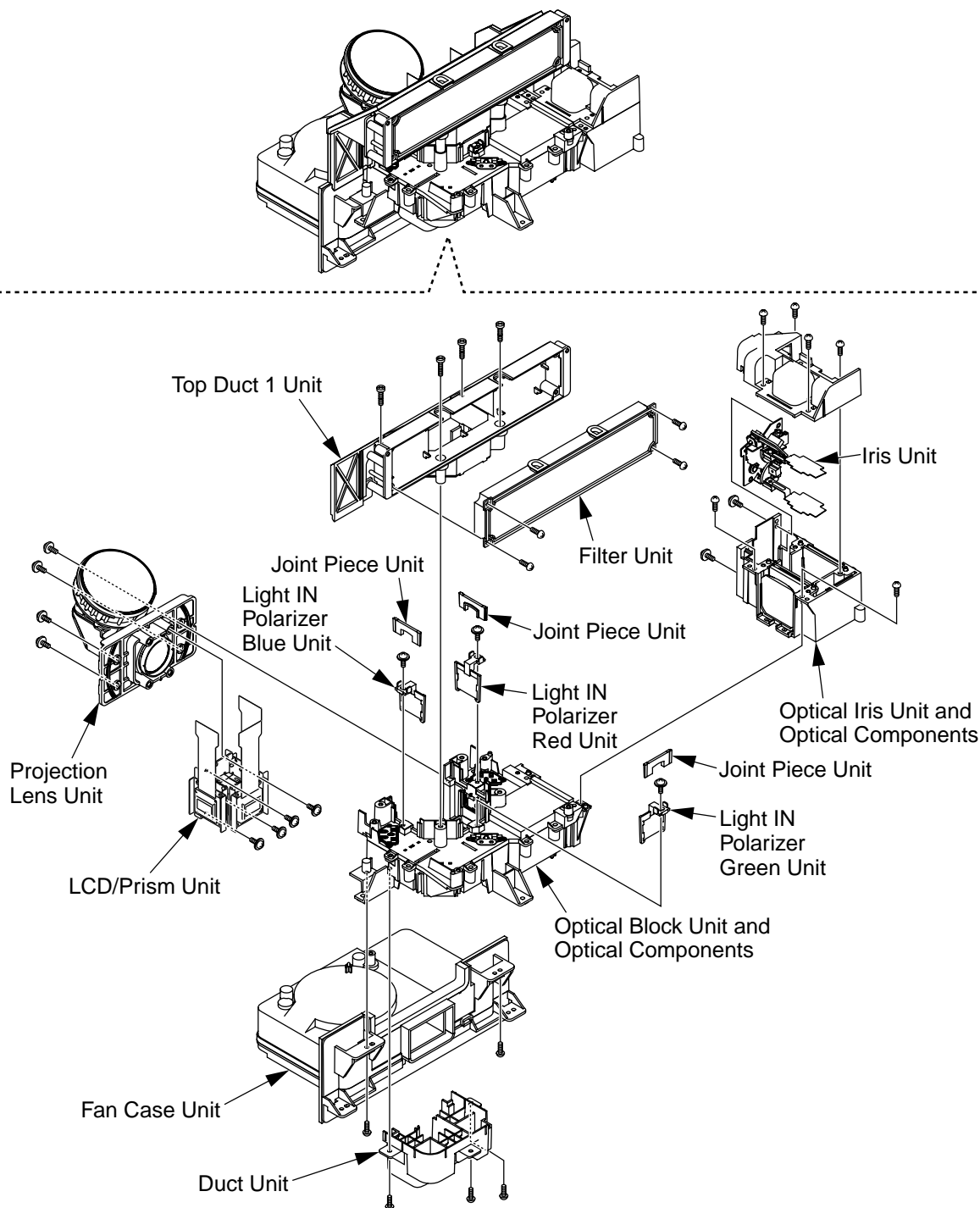
When reassembling, perform the steps in reverse order. Bend, route and dress the wires as they were originally.

Note :

- Place a cloth or some other soft material under the P.C. Boards or Unit to prevent damage.
- When reinstalling, ensure that the connectors are connected firmly and electrical components have not been damaged.
- Do not supply power to the unit during disassembly and reassembly.

Note:

When servicing these inner parts (LCD/Prism Unit, Light IN Polarizer Unit, etc.) of the Projection Unit, it is strongly recommended to replace at a clean bench of over 10K.



REMOVAL OF THE POWER P.C.B., THE LAMP UNIT, AND THE FAN 3

1. 1) Open the Power P.C.B./Power PCB Mount Metal by removing the 6 Screws (402, 421).
- 2) Disconnect Connector CN1520 (Thermal Fuse) and release from the clamber.
- 3) Remove the Lamp Unit by turning the Knob.
2. 1) Disconnect Lamp Connector by removing the 2 Screws (451).
- 2) Remove the Power P.C.B. by removing the 5 Screws (479) and release from the spacer and AC plug Slot.
3. 1) Disconnect Connector CN2703 (Fan 3) and from the clamber.
- 2) Remove Fan 3/Fan Mount Metal by removing the 2 Screws (421).
- 3) Remove Fan 3 from the Fan Mount Metal by removing the 2 Screws (492).

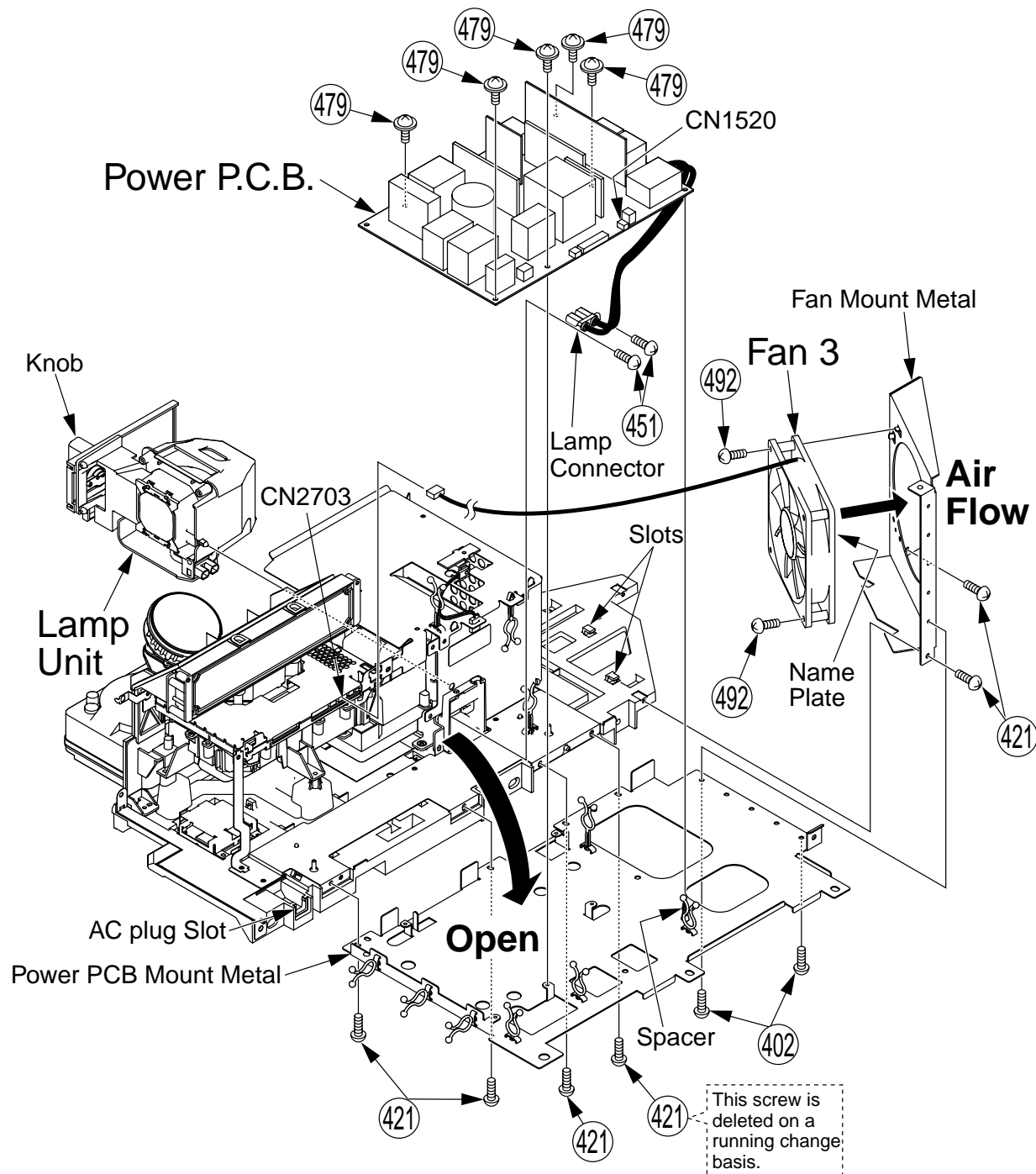


Fig. P0

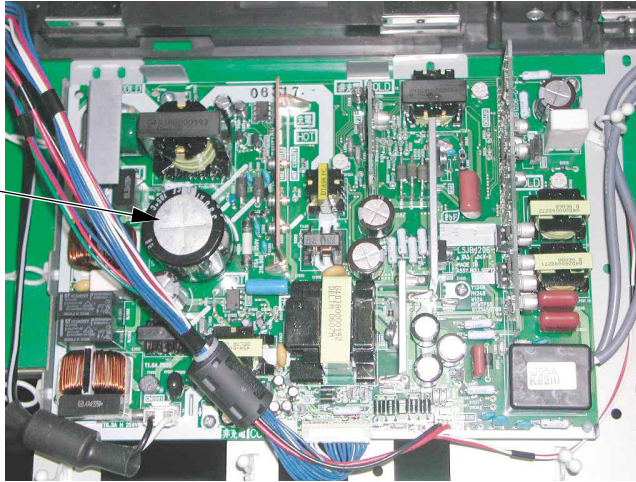
Reassembly Note for Fan 3:

Install Fan 3 so that the name plate (manufacture's name etc.) faces out and is visible from the rear.

CAUTION:

High voltage exists on the Power P.C.B. While removing Power P.C.B., do not touch any parts on the board. Hold the edge of the board when removing it.

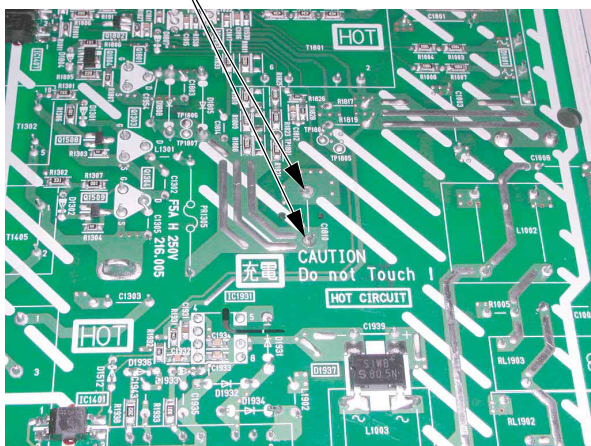
C1810:
High voltage
generated.
(approx. 400 V)



How to discharge the capacitor (C1810) on the Power P.C.B.

High voltage exists in C1810 after the AC Cord has been plugged in even once.
Before servicing, be sure to discharge the C1810 terminals by using a resistor of 100 ohm/10 W or over for 3 seconds.
Or, discharge D1808 cathode to the Radiation Plate (HOT GND).

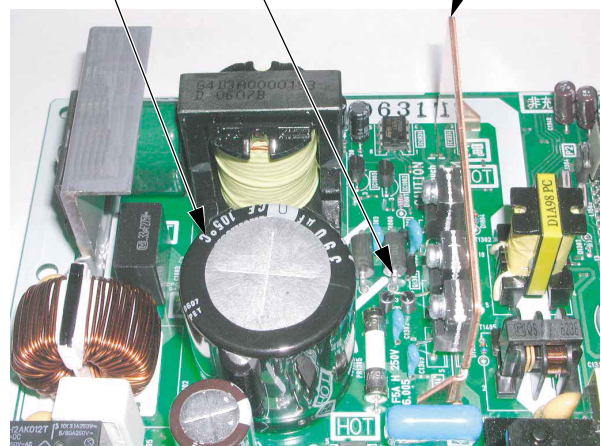
C1810 terminals



(foil side)

D1808 cathode Radiation Plate (HOT GND)
C1810

OR



(component side)

REMOVAL OF THE LCD DRIVE P.C.B.

1. Remove the Power P.C.B., the Lamp Unit, and the Fan 3. Refer to Steps 1 ~ 3 in "REMOVAL OF THE POWER P.C.B., THE LAMP UNIT, AND THE FAN 3."
2. 1) Remove the Screw (402) on the GND Wire of LVDS Cable, and disconnect the LVDS Cable from Connector CN2502.
Note: refer to next page.
2) Remove the LCD Drive GND Plate E by removing the Screw (421).
3. 1) Remove the 4 Screws (421) and peel the Sealing Tape 4 on the Top Duct as shown in View A.
2) Remove the Top Duct 2 Unit.
4. Remove the Filter Unit by removing the 4 Screws (421).
Note: Do not touch the Air Filter.
5. Remove the Top Duct 1 Unit by removing the 4 Screws (475).
6. 1) Disconnect Connectors CN2301, CN2501, CN2701, CN2702, CN2704, CN2705.
2) Remove the LCD Shield by removing the 4 Screws (421).
3) Disconnect Connectors CN2001, CN2002, CN2003 (LCD Panel Flexible Cables).
Note: Take extreme care not to damage the LCD Panel Flexible Cable.
4) Remove the LCD Drive P.C.B. (with the Shield Case) by removing the Screw (402).
7. Remove the LCD Drive Shield Case Top and the LCD Drive Shield Case Bottom.

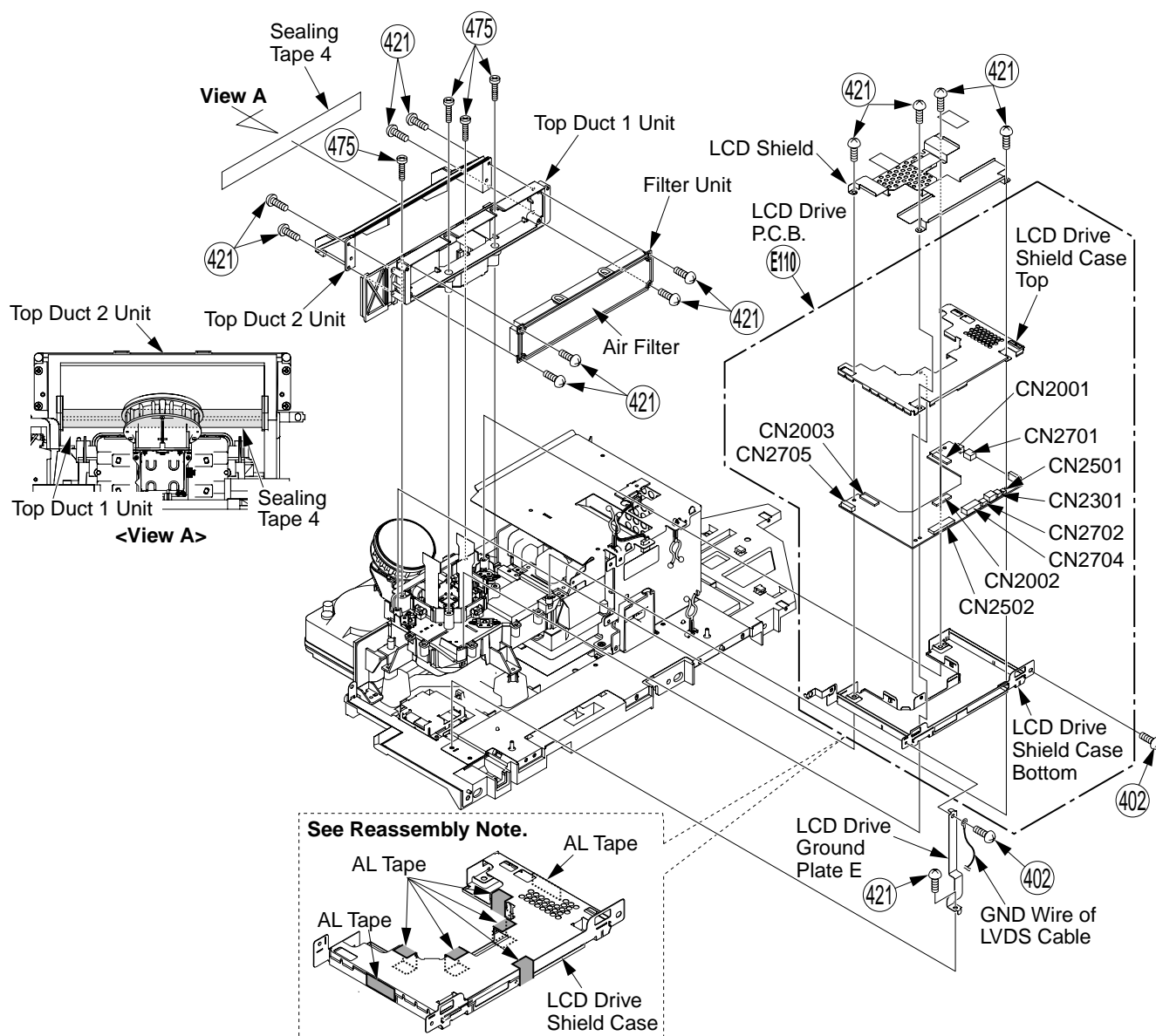


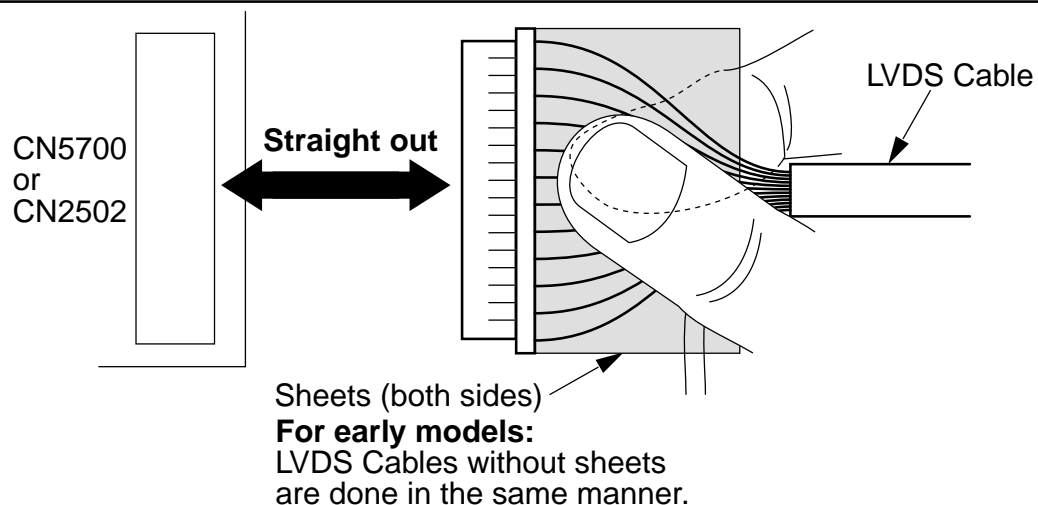
Fig. P1

Reassembly Note for the LCD Drive Shield Case

Even if there was no AL Tape on the Shield Case, after removing the LCD Drive Shield Case Top and Bottom even once, be sure to place 7 pieces of AL Tape on the LCD Drive P.C.B. as shown above.

Note:

Grasping the center of both sides of the sheet or cable with your fingers, slowly and steadily pull the LVDS Cable straight out from the connector. Do not joggle the LVDS cable while disconnecting. Reconnecting is done in the same manner.



REMOVAL OF THE LIGHT IN POLARIZER UNITS

1. Remove the LCD Drive P.C.B. Refer to Steps 1 ~ 6 in "REMOVAL OF THE LCD DRIVE P.C.B."
2. Remove the 3 Joint Piece Units.
3. Remove the Light IN Polarizer Red, Green, Blue Unit by removing the 3 Screws (423).

Note:

1. Use extreme caution not to damage the Light IN Polarizer Units (Red, Green, Blue), when servicing.
2. Clean the Light IN Polarizer Units if necessary. Refer to "Cleaning Methods" in Maintenance.

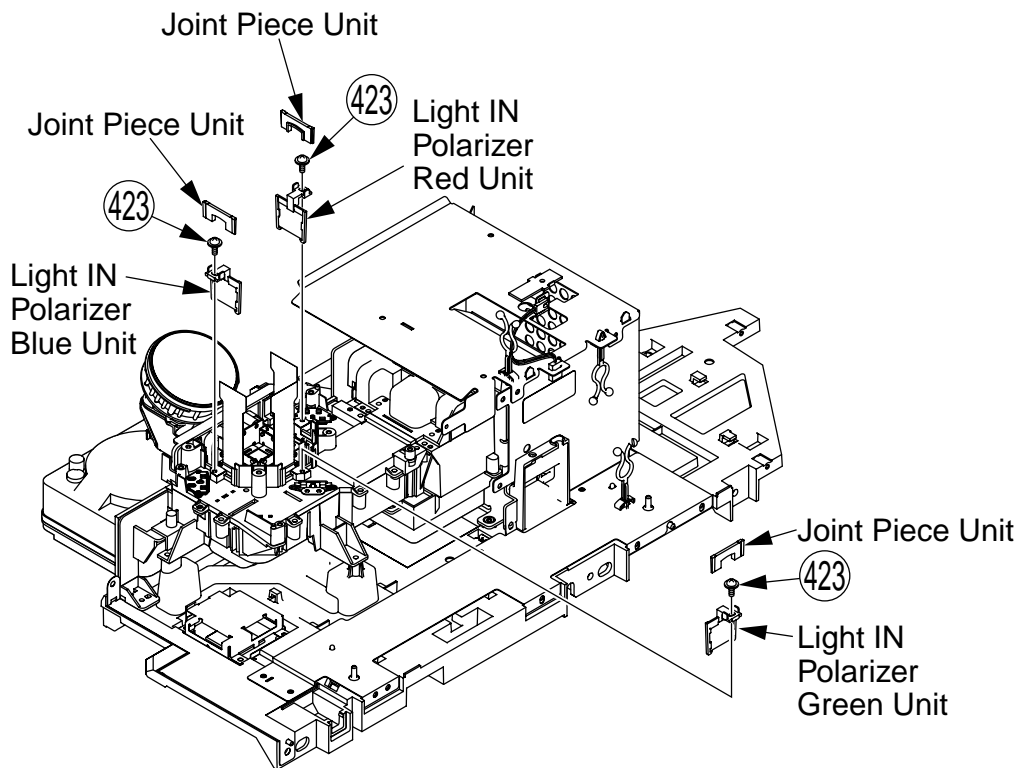


Fig. P2-1

Reassembly Note for the Light IN Polarizer Unit (Red, Green, Blue):

- 1) After replacing the Light IN Polarizer Units, be sure to perform Polarizer Adjustment.
- 2) Make sure of the mark color to distinguish the Light IN Polarizer Units (Polarizer).

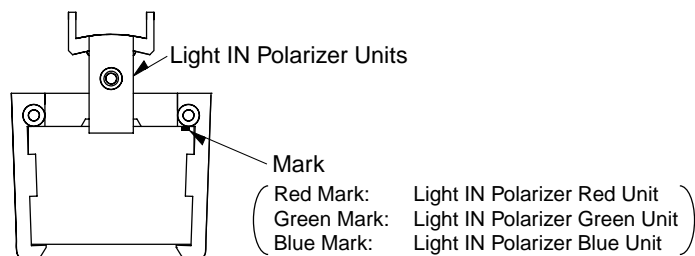


Fig. P2-2

REMOVAL OF THE LCD/PRISM UNIT, THE PROJECTION LENS UNIT, THE FAN CASE UNIT (FAN 1), THE FAN 2, AND THE COVER SWITCH P.C.B.

1. Remove the LCD Drive P.C.B. Refer to Steps 1~6 in "REMOVAL OF THE LCD DRIVE P.C.B."
2. Remove the Lamp Side Panel with Lamp Top Panel by removing the 2 Screws (421).
3. 1) Disconnect Connector CN9500 on the Iris P.C.B. and release from the clamber.
2) Remove the Engine Frame by removing the 5 Screws (491).
4. Remove the Cover Switch P.C.B. by removing Screw (421).
5. Remove Fan 2 by removing the 2 Screws (493).

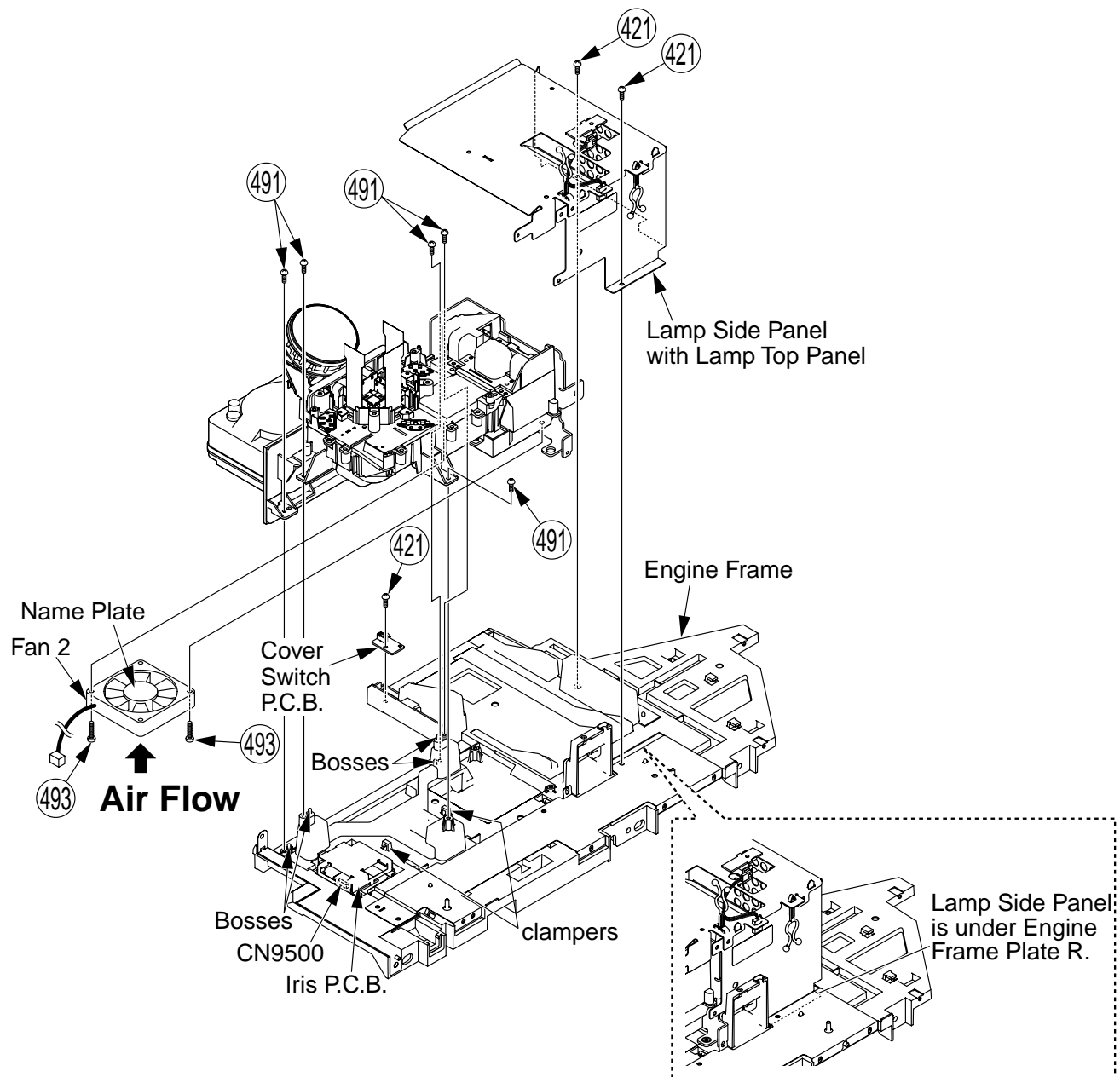


Fig. P3-1

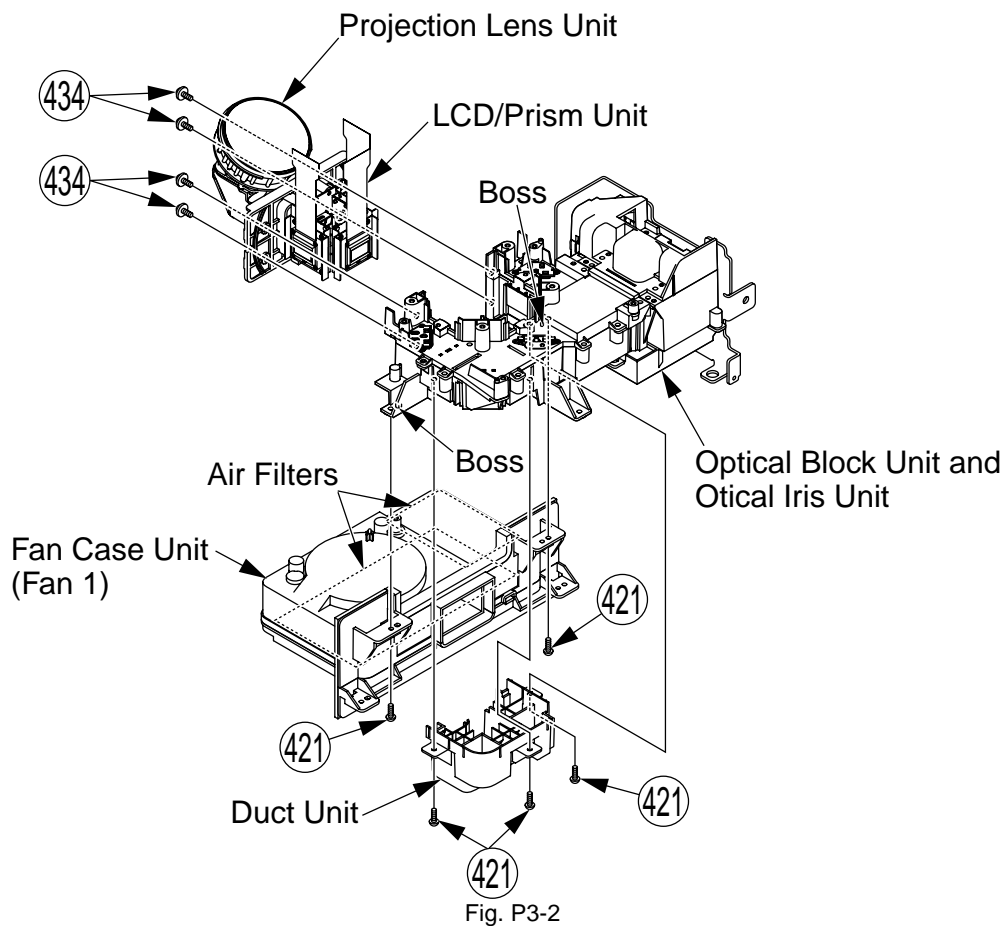
Reassembly Note for Lamp Side Panel:

Install so that the Lamp Side Panel is under the Engine Frame Plate R.

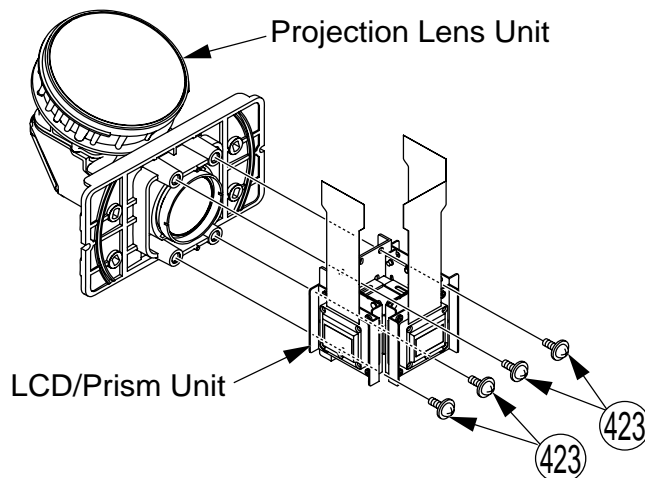
Reassembly Note for Fan 2:

Install Fan 2 with the 2 Screws (493) so that the name plate (manufacture's name etc.) faces in (not visible from the outside).

6. Remove the Duct Unit by removing the 3 Screws (421).
7. Remove the Fan Case Unit by removing the 2 Screws (421).
Note:
 Do not touch the Air Filters.
8. 1) Remove both the Projection Lens Unit and the LCD/Prism Unit by removing the 4 Screws (434).
Note:
 1. Use extreme caution when handling the LCD/Prism Unit to avoid damage, dust, spots (especially fingerprints), etc.
 2. Clean the LCD/Prism Unit if necessary. Refer to "Cleaning Methods" in Maintenance.

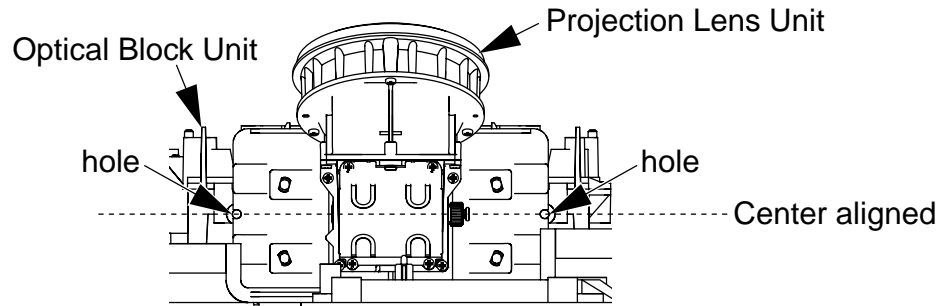


- 2) Remove the LCD/Prism Unit from the Projection Lens Unit by removing the 4 Screws (423).



Reassembly Note for LCD/Prism Unit and Projection Lens Unit:

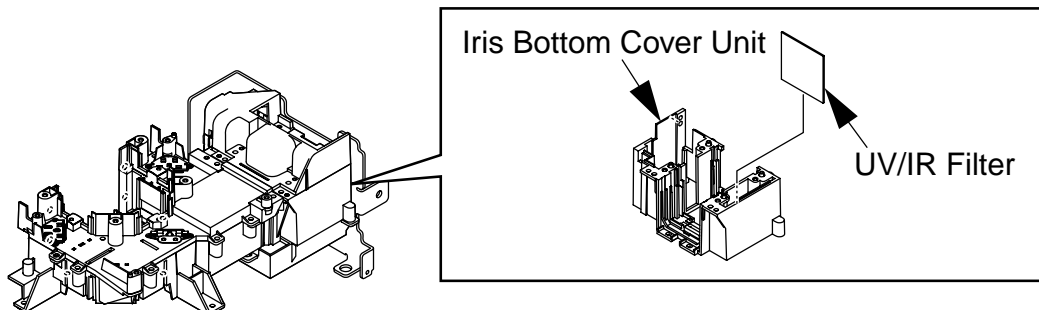
1. Be sure to install the LCD/Prism Unit and the Projection Lens Unit before installing the Fan Case Unit. Otherwise, the Fan Case Sponge, etc. will not fit properly with the Projection Lens Unit.
2. Be sure to install the LCD/Prism Unit and the Projection Lens Unit in the Optical Block Unit as shown.



(For 61 inch models)

Replacement Note for Iris Bottom Cover Unit:

When replacing with a new Iris Bottom Cover Unit (LSXA0755), see the stamp on the LCD Drive Shield Case Top. If stamp number is C60402 or lower, replace with a new UV/IR Filter (LSDL0350) at the same time.



Stamp: C60402 or lower
Effective set (several dozen pieces)



REMOVAL OF THE IRIS P.C.B.

- 1) Disconnect Connectors CN9500, CN9502.
- 2) Remove the Iris P.C.B. by removing the 3 Screws (421).

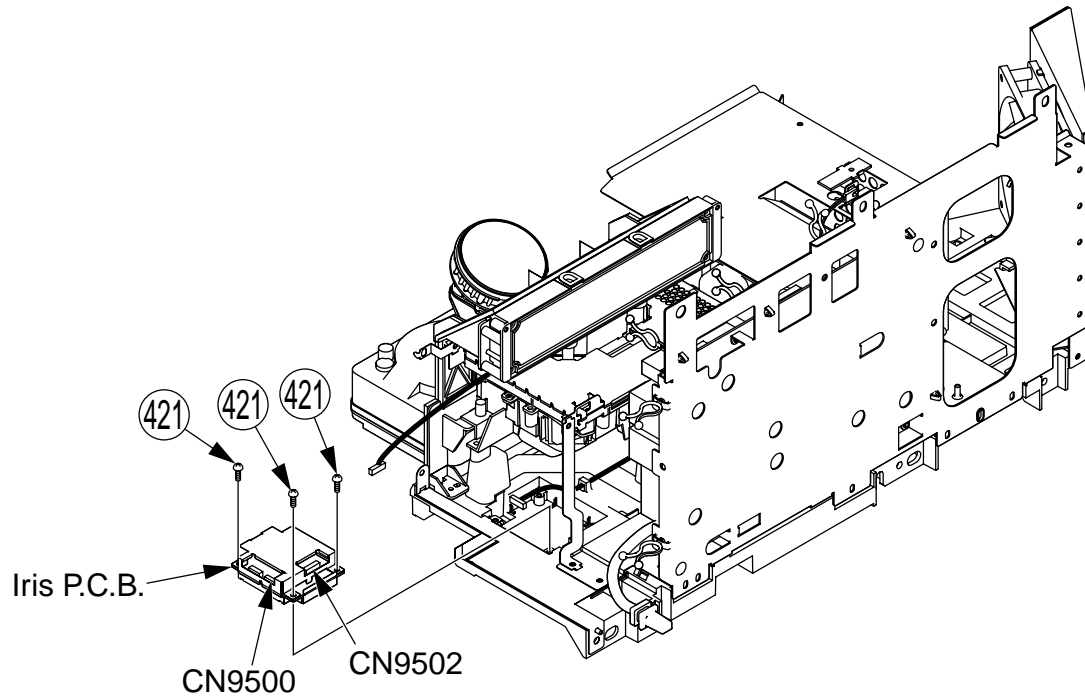
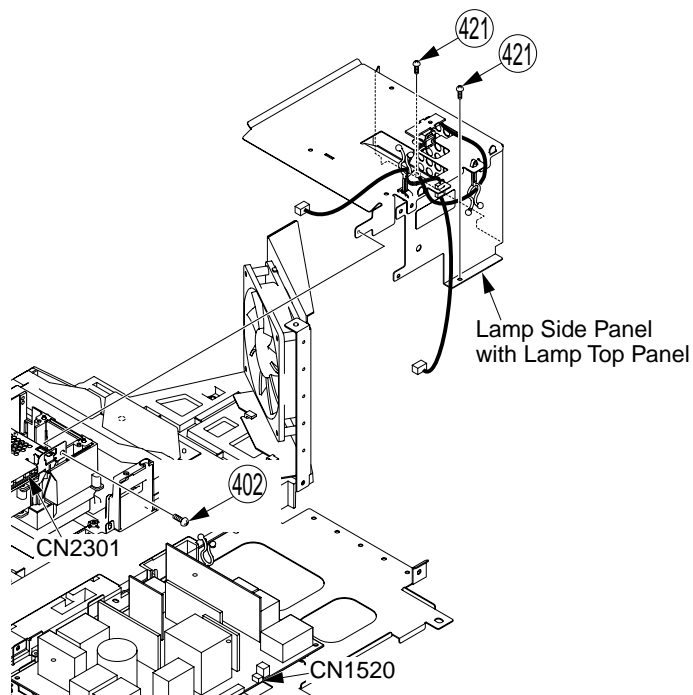


Fig. P4

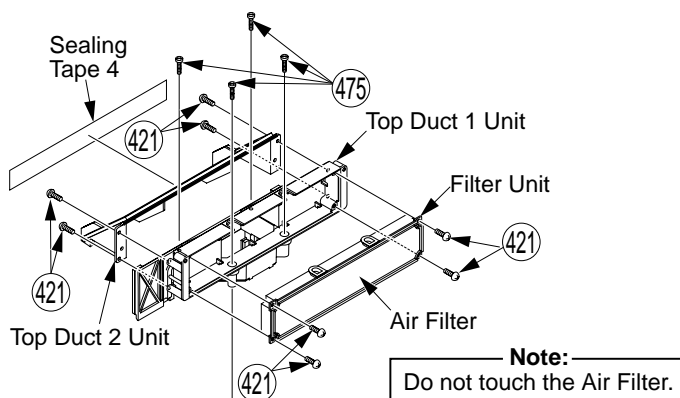
REMOVAL OF THE IRIS UNIT

1. Removing the Lamp Side Panel with Lamp Top Panel

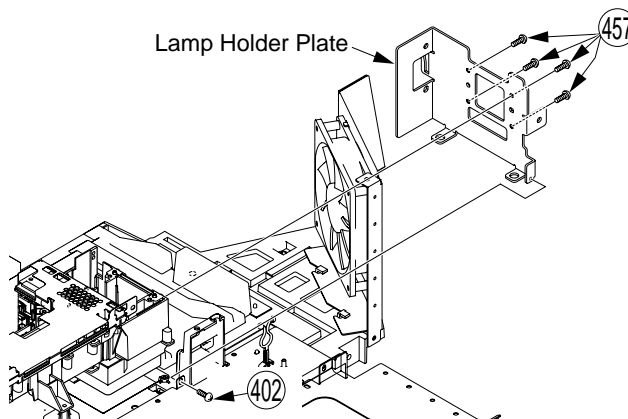


2. Removing the Filter

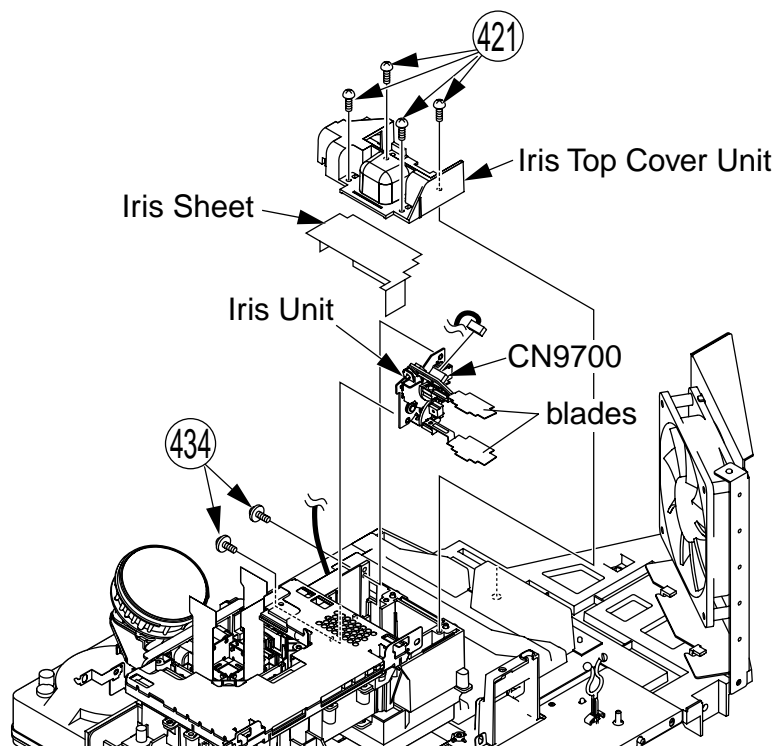
- a) Filter Unit
- b) Sealing Tape 4
- c) Top Duct 2 Unit
- d) Top Duct 1 Unit



3. Removing the Lamp Holder Plate

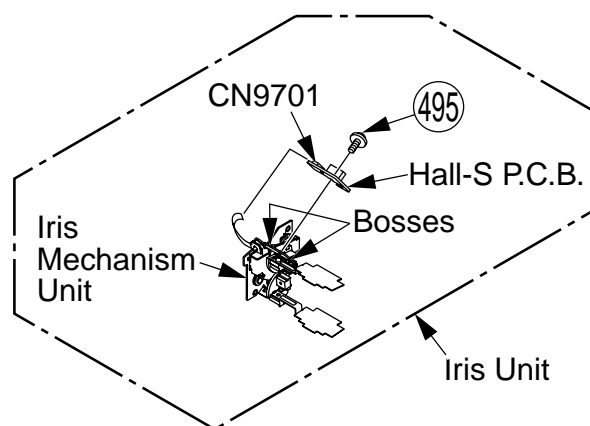


4. Removing the Iris Unit

**Note:**

Do not touch or damage the blade of the Iris Unit while handling.

5. Removing the Hall-S P.C.B.

**Reassembly Note for Iris Unit:**

1. 1) Install the Iris Unit so as not to touch or damage the Hall Sensor, blades of the Iris Unit while handling.
- 2) Place the Iris Sheet.
- 3) Tighten the 2 Screws (434).
- 4) Install the Iris Top Cover Unit so as not to pinch the Connector Cable with the 4 Screws (421).
2. After installing, perform the IRIS CONFIRMATION. Refer to "Adjustment Procedures 2."

10 Measurements and Adjustments

10.1. Adjustment Procedures 1

WHEN INSTALLING THE PROJECTION UNIT OR THE BASE BODY UNIT INTO THE UNIT AT THE USER'S LOCATION:

The following ADJUSTMENT of the Projection Unit must be performed.

a. Focus Adjustment

Note:

The Focus Adjustment is not normally necessary when reinstalling.

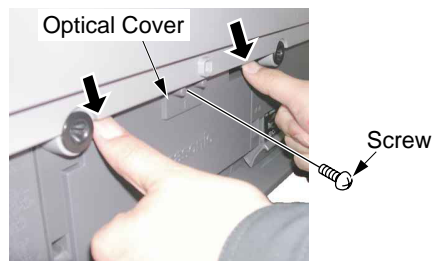
However, the Focus Adjustment should be performed when replacing the new Projection Unit or new Base Body Unit.

b. Mechanical Picture Position Adjustment

c. Electrical Picture Position Adjustment

Adjustment Preparation:

1. Install all parts except the Front Cover Unit
Then, remove the Optical Cover by removing the Screw and 2 latch tabs.



(With Front Cover Unit and Optical Cover removed)

<Front View>

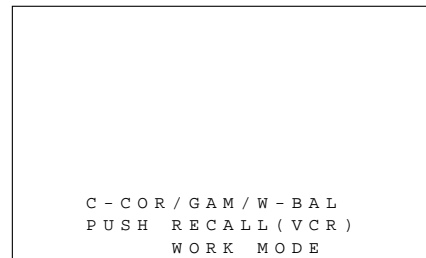
Fig. M1-1

Note:

When the rear cover is disassembled, the screen can be moved back and forth, which could affect the video display vertical position. This could also cause the vertical adjust to be at or near its limit.

Only try the picture position adjustment with the rear cover assembled!

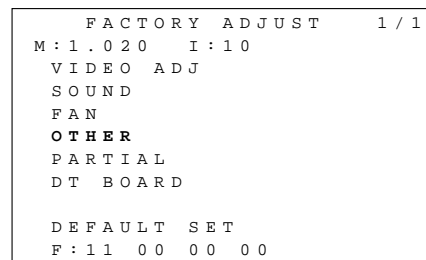
2. Turn the power on.
3. Press and hold the VOLUME DOWN button on the unit and the RECALL key on the remote for more than 5 seconds in power on condition. "WORK MODE" will appear on the screen.



<Work Mode>

Fig. M1-2

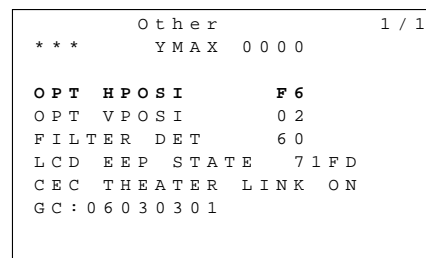
4. Press the VCR key to go to VCR mode, then the RECALL key on the remote for more than 1 second. "FACTORY ADJUST" will appear on the screen.



<Factory Adjust mode>

Fig. M1-3

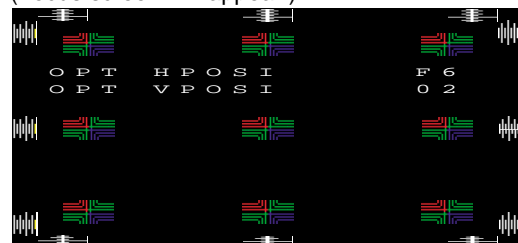
5. Press the TV key to return to TV mode, then press the CH UP/DOWN key on the remote to select "OTHER" on menu and press the OK key. "OTHER" menu will appear.



<Factory Adjust Mode>
(OTHER menu 1/1)

Fig. M1-4

6. Press the VOLUME UP/DOWN key on the remote. (Focus screen will appear.)



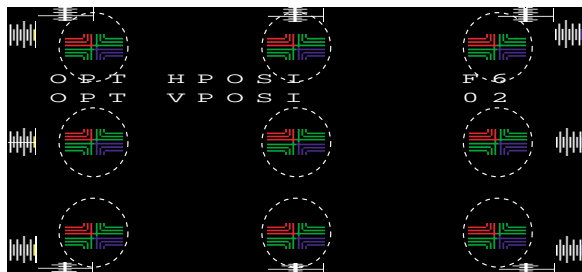
<Focus Screen>

To release this mode:

1. After completing the ADJUSTMENT, press the CH UP/DOWN key on the remote to return to the OTHER menu.
2. Press RECALL key twice to return to Work Mode, and press and hold the VOLUME DOWN button on the unit and the RECALL key on the remote for more than 5 seconds. Or, turn off the power.
3. Install the Optical Cover with the Screw and the Front Cover Unit.

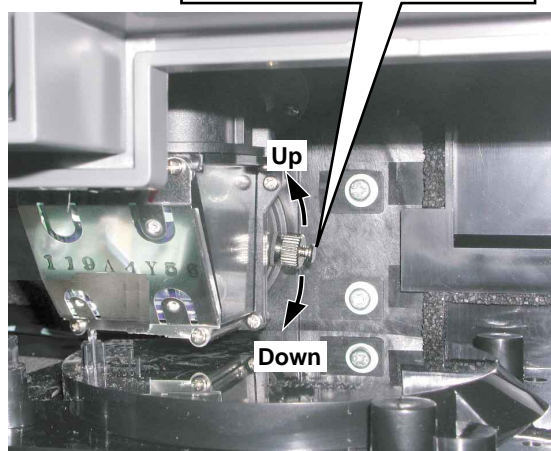
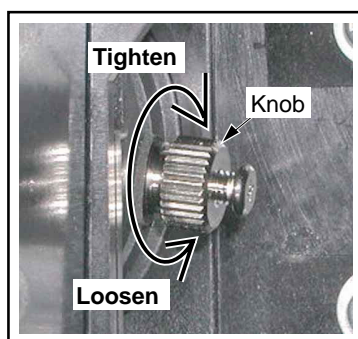
a. Focus Adjustment

- 1) Confirm that each of the pixels in the nine portions are clearly visible.



<Focus Screen>

- 2) If not, loosen the Knob on the Projection Lens until the Knob can be moved.



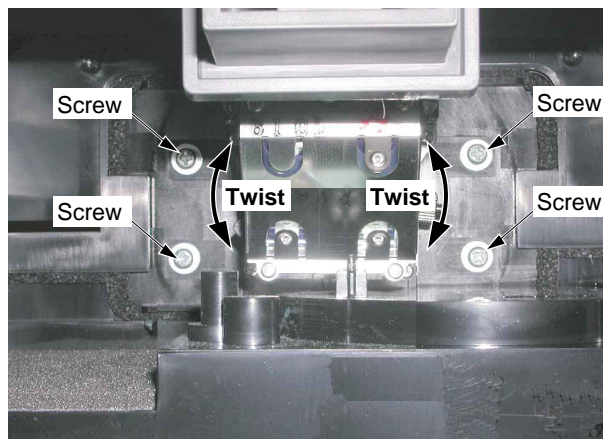
<Front View>

Fig. M1-6

- 3) Adjust the Knob by moving up or down so that each of the pixels in the nine portions is clearly visible to obtain the best focus.
- 4) Tighten the Knob.

b. Mechanical Picture Position Adjustment (Tilt)

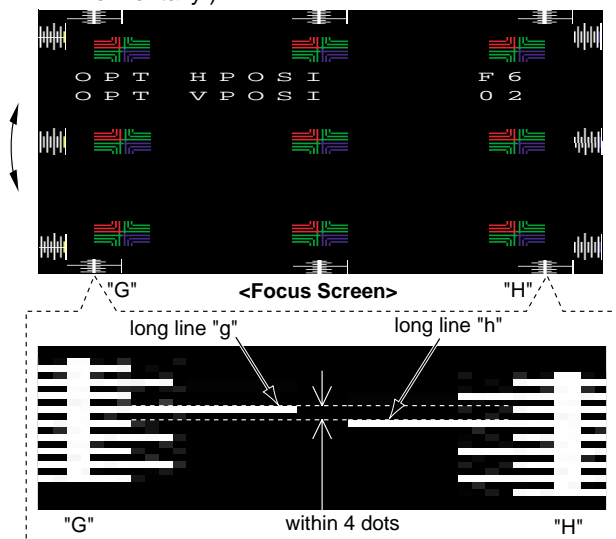
- 1) Loosen the 4 Screws on the Projection Unit.



<Front View>

Fig. M1-5

- 2) Adjust the Projection Lens by twisting so that the long line "g" and the long line "h" are within 4 dots. (The long line "g" and the long line "h" will be almost aligned horizontally.)



Note:

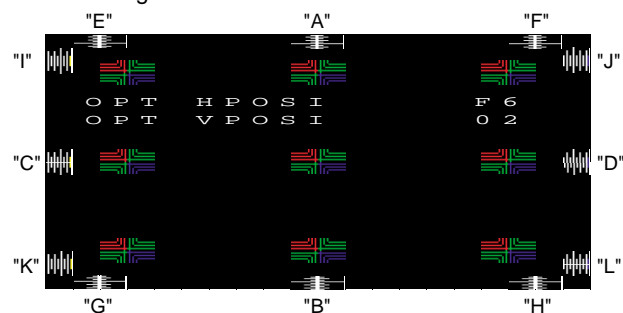
If the Projection Lens is twisted left, the Focus Screen twists left.

If the Projection Lens is twisted right, the Focus Screen twists right.

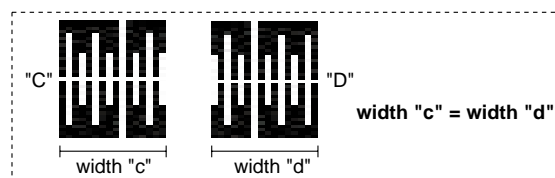
- 3) Tighten the 4 Screws while fixing the Projection Lens.

c. Electrical Picture Position Adjustment

- 1) Adjust OPT HPOSI so that "C" is symmetrical to "D" by pressing the VOLUME UP/DOWN key on the remote to change the value.
- 2) Press the CH UP/DOWN key on the remote to return to the OTHER menu.
- 3) Select OPT VPOSI by pressing CH UP/DOWN key on the remote.
- 4) Adjust OPT VPOSI so that "A" is symmetrical to "B" by pressing the VOLUME UP/DOWN key on the remote to change the value.



<Focus Screen>



- 5) Confirm that all "A", "B", "C", "D", "E", "F", "G", "H", "I", "J", "K", "L" are each almost symmetrical.
- 6) If not, adjust the "OPT HPOSI" and "OPT VPOSI" (repeat steps 1-6) until the picture is in the correct position.
- 7) Press the CH UP/DOWN key on the remote to return to the OTHER menu.

The table below shows which adjustments are necessary according to the unit parts and individual parts to be replaced. Make sure to perform these adjustments shown below as necessary.

Note: ○ : Adjustment item

Note: △ : When replacing the LCD/Prism Unit, confirm the color uniformity on the screen. If OK, Full Mirror/Polarizer Adjustment are not needed.
If NG, perform Full Mirror/Polarizer Adjustment.

Note: When replacing the Projection Unit or the Base Body Unit, any of above adjustment are not needed.

88

Perform the necessary adjustments in numerical order in each section.



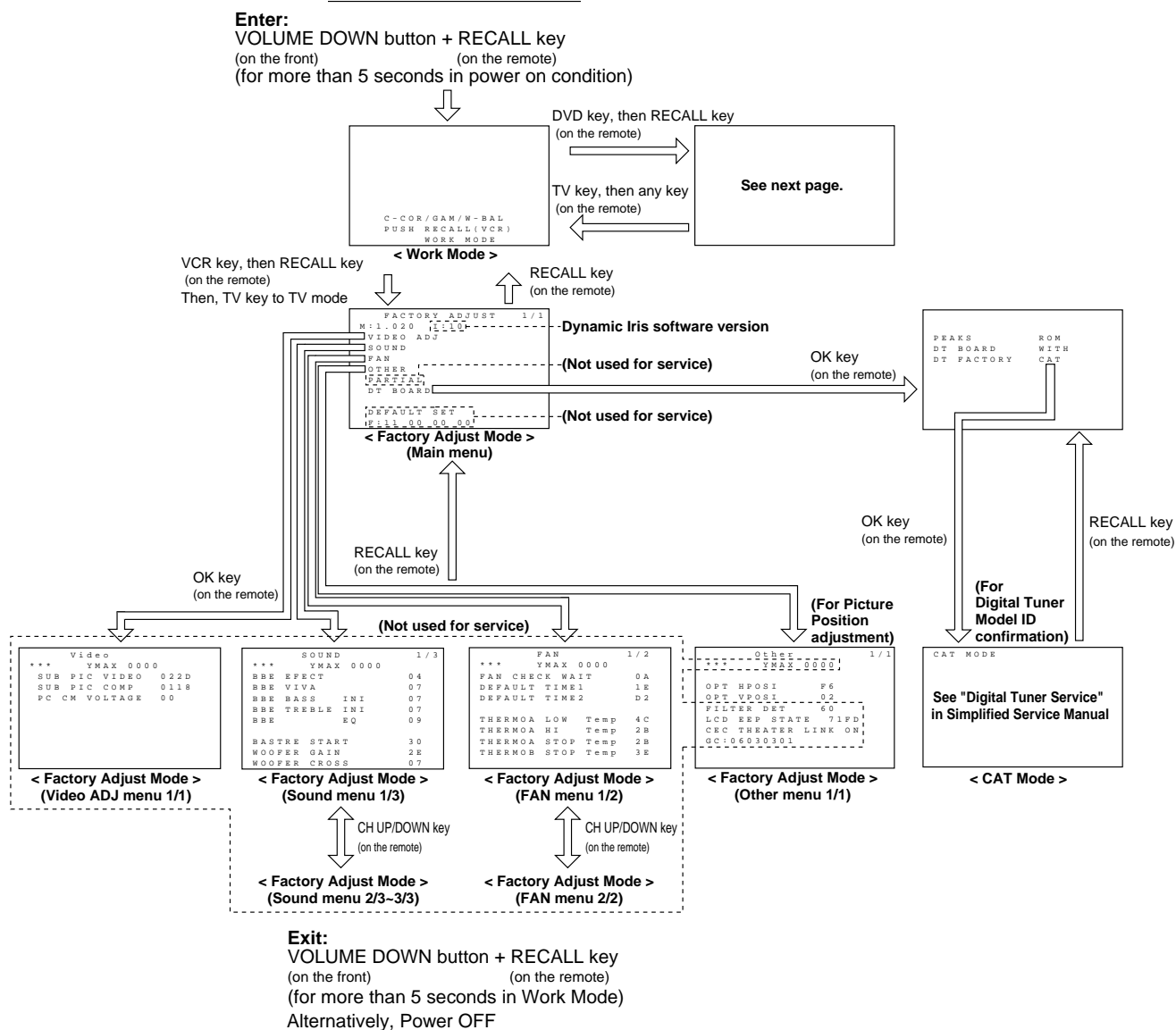
Section	Step No.	Adjustment Item	Necessary Equipment	Input	
Mechanical (Projection Unit) Adjustment Section	①	Full Mirror Adjustment	·Screwdriver (+)/(-) ·NTSC Video Pattern Generator	No signal or 100% White Signal or 100% White Internal pattern	(VIDEO 1) ---
	②	Polarizer Adjustment	·Screwdriver (+) ·PC(2) ·(NTSC Video Pattern Generator)	No signal or Test Pattern Signal ·Black Signal or Black Signal	(PC) or (VIDEO 1)
LCD Drive P.C.B. Adjustment Section	①	Fan 1 Voltage Adjustment	·PC(1) ·RS232C I/F Tool ·Digital Volt Meter ·Software(1)	---	---
	②	Fan 2 Voltage Adjustment	·PC(1) ·RS232C I/F Tool ·Digital Volt Meter ·Software(1)	---	---
	③	Fan 3 Voltage Adjustment	·PC(1) ·RS232C I/F Tool ·Digital Volt Meter ·Software(1)	---	---
	④	VCOM Adjustment	·PC(1) ·PC(2) with 720p video graphics card ·RS232C I/F Tool ·Software(1)	Test Pattern Signal ·70% Red Horizontal Signal ·70% Green Horizontal Signal ·70% Blue Horizontal Signal	PC
	⑤	White Balance Adjustment	·PC(1)/(2) ·RS232C I/F Tool ·Software(2) ·NTSC Video Pattern Generator ·Color Temperature Meter	Gray Scale Pattern Signal (10 scales) Test Pattern Signal ·Gray Scale Pattern Signal (16 scales) ·50% White Pattern Signal	VIDEO 1 or PC

Note: The PC (1) must have a 10-key keyboard for LCD Drive Adjustment software (1).
The PC (2) is for Test Pattern Signal.

Fig. E1-2

WORK MODE AND FACTORY ADJUST MODE

Work Mode Map



Factory Adjust Mode

This mode is required when:

- Performing Mechanical Picture Position, Focus and Electrical Picture Position adjustment (Other menu).

To enter the Factory Adjust Mode:

- 1) In Work Mode, press the VCR key go to VCR mode, then the RECALL key for more than 1 second. The unit will go into Factory Adjust Mode. ("FACTORY ADJUST" will appear on the screen.)
- 2) Press the TV key to return to TV mode, then press CH UP/DOWN key to select and press the OK key to set the item to be adjusted.
- 3) After completing adjustments, press RECALL key twice to return to Work Mode.
The adjustment data will be written to the EEPROM IC.

Note:

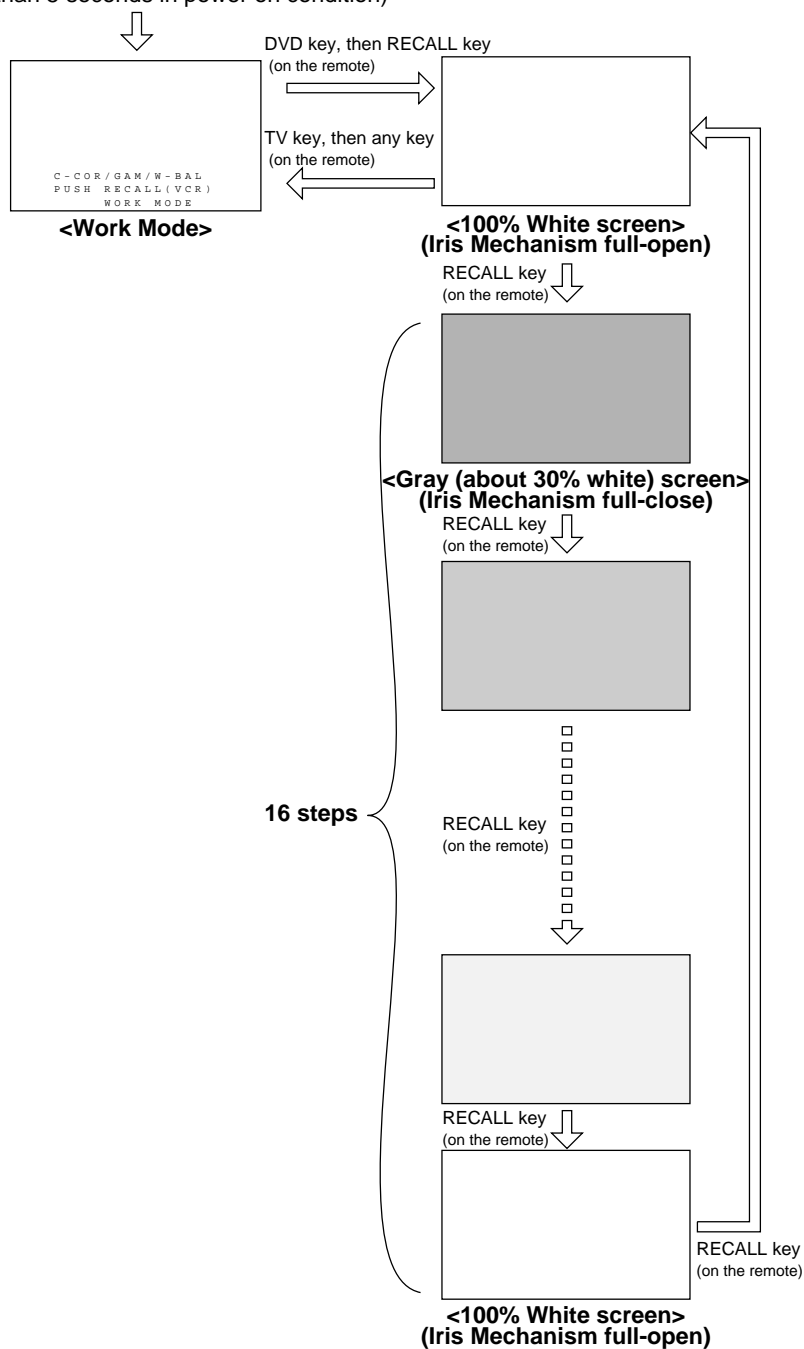
Do not unplug the AC Cord in Factory Adjust Mode or the adjustment data will not be written to the EEPROM IC.

IRIS CONFIRMATION

Work Mode Map (Iris Confirmation)

Enter:

VOLUME DOWN button + RECALL key
 (on the front) (on the remote)
 (for more than 5 seconds in power on condition)



Note for Iris Confirmation


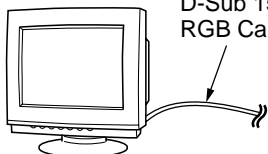

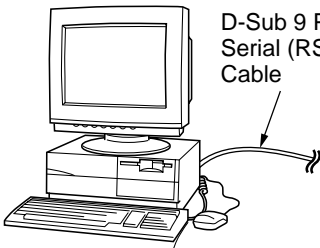

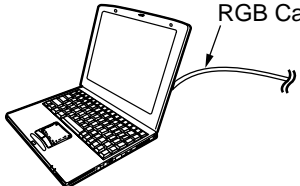
After replacing the Iris Unit or the Iris P.C.B., confirm that the screen becomes brighter every 16 steps by pressing the RECALL key using this mode. (Iris Mechanism opens every 16 steps.)

TEST EQUIPMENT

To do all of these electrical adjustments, the following equipment is required.

1. Dual-Trace Oscilloscope
Voltage Range: 0.001 V to 50 V/Div.
Frequency Range: DC to 50 MHz
Probes: 10:1, 1:1
2. NTSC Video Pattern Generator
3. Plastic Tip Driver and Non-Metal Driver
4. (+) Screwdriver and (-) Screwdriver
5. DVM (Digital Volt Meter)
6. Color Temperature Meter
7. **PC REQUIREMENTS**

The following PCs and Cables are required for Service Position. Prepare the following equipment locally.

PCs	Cables	Illustration	Specification
XGA Color PC Monitor for Main P.C.B. Adjustment	D-Sub 15 Pin RGB Cable for connecting the Monitor P.C.B. (LSEP3102A)  male (For Monitor P.C.B. side)	 Note: PC (1) can be used for monitoring.	Monitor: 17 inch XGA (1,024 X 768) Color PC Monitor or higher
PC (1) for LCD Drive P.C.B. Adjustment	D-Sub 9 Pin Serial (RS232C) Cable for connecting the RS232C I/F Tool (LSUA0043)  female-female	 Note: PC (1) must have a 10-key keyboard.	Type: Desk Top PC or with 10-key keyboard (Desk Top recommended) Monitor: 17 inch XGA (1,024 X 768) Color PC Monitor or higher OS: Windows® 95,98 or later Port: D-Sub 9 Pin Serial (RS232C)
PC (2) for Test Pattern Signal	D-Sub 15 Pin RGB Cable for connecting the PC Input Terminal  male-male	 Note: PC (2) must have a 10-key keyboard.	Type: Notebook PC recommended OS: Windows® 95,98 or later Port: RGB output

8. Test Pattern Signal : testptnmmd2002.exe
9. Application Software for LCD Drive P.C.B. Adjustment

Application software	files		
Software (1): LCD Drive Adjustment	LCDDrv1.CAB LCDDrv4.CAB	LCDDrv2.CAB setup.exe	LCDDrv3.CAB SETUP.LST
Software (2): FFF_2006D	Vcom_2006.exe - - - - (total 46 files)	BakPara.dat	DefPara.dat

HOW TO READ THE ADJUSTMENT PROCEDURES

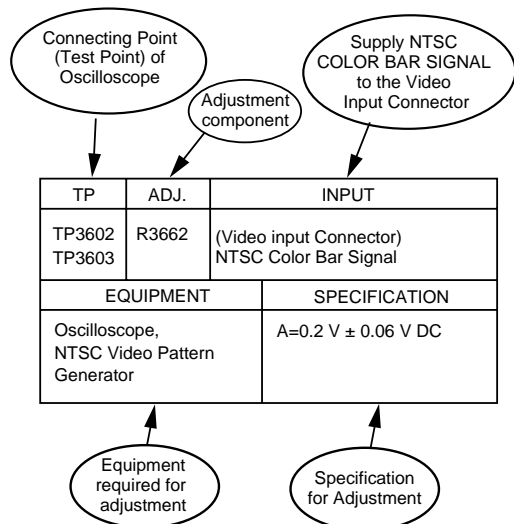


Fig. E2-1

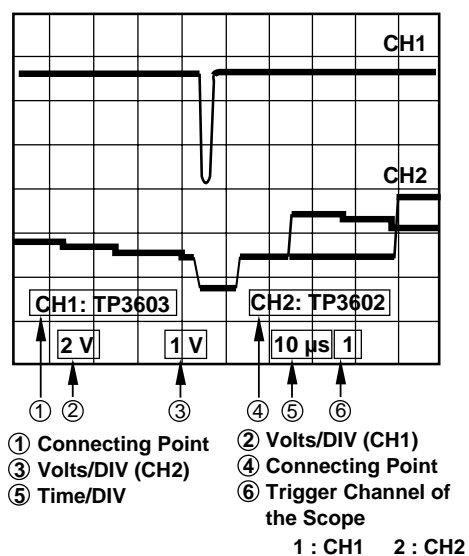


Fig. E2-2

INPUT TERMINAL INFORMATION

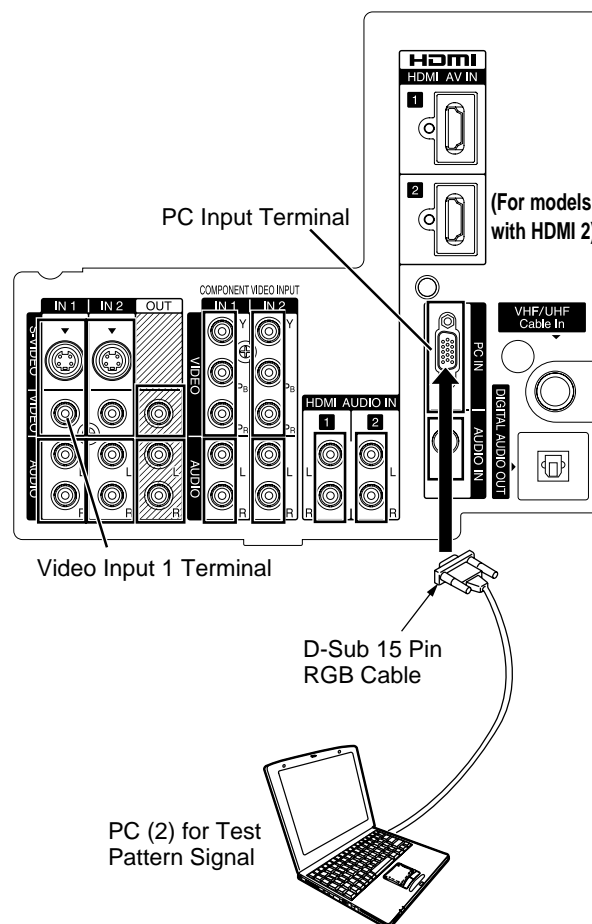


Fig. E2-3

MECHANICAL (PROJECTION UNIT) ADJUSTMENT SECTION

FULL MIRROR ADJUSTMENT

Purpose:

To set the Full Mirror in the proper position.

Symptom of Misadjustment:

The non-uniformity color will appear.

TP	ADJ.	INPUT
	Dichroic Mirror Green Full Mirror Red Full Mirror Blue	No signal input (White Screen is displayed.) (SET UP 1) or (VIDEO Input 1 Terminal or Internal Pattern) White Signal (100%) (SET UP 2 or SET UP 3)
EQUIPMENT		SPECIFICATION
NTSC Video Pattern Generator, Screwdriver (+) (-)		Refer to Description below

Note:

This adjustment should be done in a darkroom.

SET UP 1:

1. Place the unit into Service Position (2).
2. Set to a desired mode except TV mode by pressing TV/VIDEO key on the remote.
3. Turn off the unit power and unplug the AC Cord.
4. Disconnect the LCD Flat Panel connectors to be no signal input. Then, plug in the AC Cord and turn on the power.

CAUTION:

When disconnecting/reconnecting the LCD Flat Panel connectors, be sure to unplug the AC Cord.

5. Perform Full Mirror (Green, Red, and Blue) Adjustment as follows in order.

OR

SET UP 2:

1. Place the unit into Service Position (2).
2. Connect the NTSC Video Pattern Generator to the VIDEO Input 1 Terminal.
3. Supply 100 % White Signal and set to VIDEO 1 mode by pressing TV/VIDEO key on the remote.
4. Perform Full Mirror (Green, Red, and Blue) Adjustment as follows in order.

OR

SET UP 3:

1. Place the unit into Service Position (2).
2. With power on, press and hold the VOLUME DOWN button and the RECALL key on the remote for more than 5 seconds. "WORK MODE" will appear on the screen.
3. Press the DVD key to go to DVD mode, then the RECALL key on the remote for more than 1 second. "100% White" will appear from internal pattern. (The Iris Mechanism opens fully.)
4. Perform Full Mirror (Green, Red, and Blue) Adjustment as follows in order.

DICHROIC MIRROR GREEN ADJUSTMENT

1. Loosen 2 Screws (A) of the Mirror Holder of the Dichroic Mirror Green as they can be moved slightly.
2. Insert a Screwdriver (-) into Portion (a) and/or (a') and turn it to move the Mirror Holder of the Dichroic Mirror Green as indicated by the arrow. Stop moving at the point where there is no shadow around the screen. If there is shadow somewhere on the screen, repeat the above process.

Then, tighten 2 Screws (A) securely (0.2-0.3 N·m).

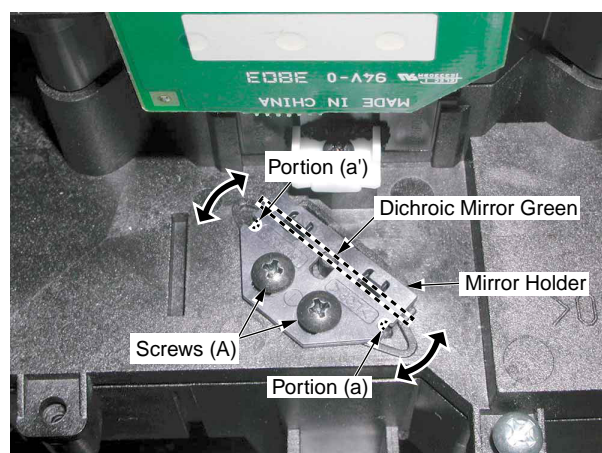


Fig. E3-1

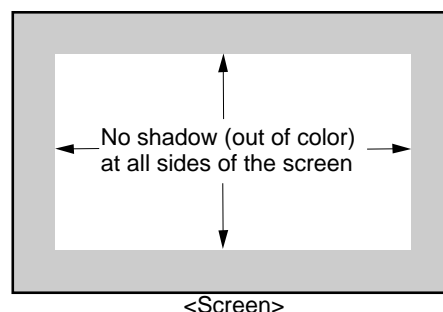
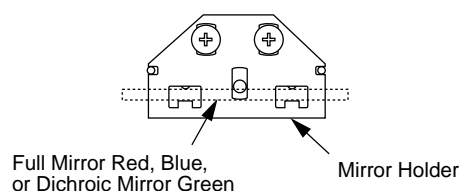


Fig. E3-1a

Note for Mirror Holders:

After adjusting the Mirror Holders, confirm the Full Mirror Red, Blue, and the Dichroic Mirror Green in correct position as shown.



FULL MIRROR RED ADJUSTMENT

1. Loosen 2 Screws (B) of the Mirror Holder of the Full Mirror Red as they can be moved slightly.
2. Insert a Screwdriver (-) into Portion (b) and/or (b') and turn it to move the Mirror Holder of the Full Mirror Red as indicated by the arrow. Stop moving at the point where there is no shadow around the screen.
If there is shadow somewhere on the screen, repeat the above process.

Then, tighten 2 Screws (B) securely (0.2-0.3 N·m).

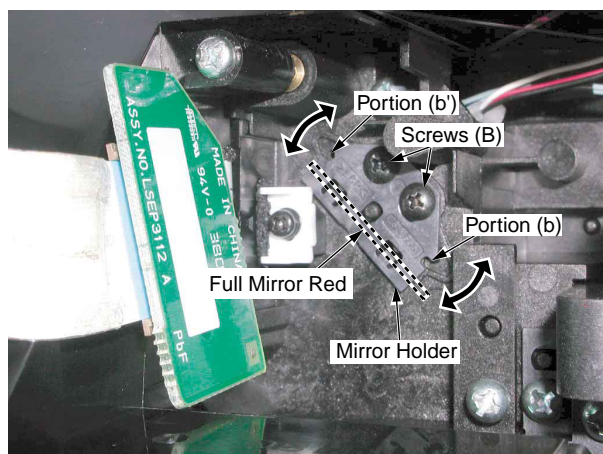
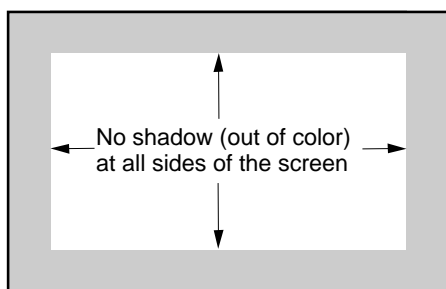


Fig. E3-2



<Screen>

Fig. E3-2a

FULL MIRROR BLUE ADJUSTMENT

1. Loosen 2 Screws (C) of the Mirror Holder of the Full Mirror Blue as they can be moved slightly.
2. Insert a Screwdriver (-) into Portion (c) and/or (c') and turn it to move the Mirror Holder of the Full Mirror Blue as indicated by the arrow. Stop moving at the point where there is no shadow around the screen.
If there is shadow somewhere on the screen, repeat the above process.

Then, tighten 2 Screws (C) securely (0.2-0.3 N·m).

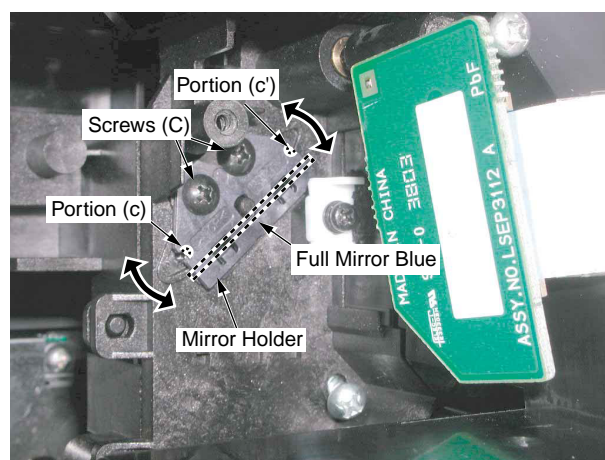
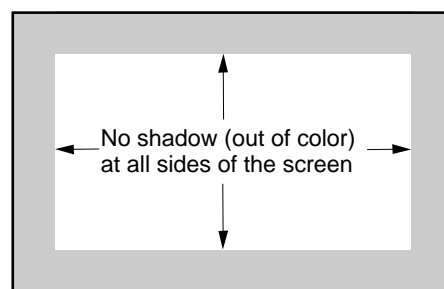


Fig. E3-3



<Screen>

Fig. E3-3a

POLARIZER ADJUSTMENT

Note:

Be sure to perform this adjustment after Full Mirror Adjustment are completed.

Purpose:

To set the polarizer in the proper position.

Symptom of Misadjustment:

The picture will become bluish or reddish or greenish.

TP	ADJ.	INPUT
	Light IN Polarizer Green Light IN Polarizer Red Light IN Polarizer Blue	No signal input (Black screen is displayed.) (SET UP 1) or (PC Input Terminal) Black Signal (SET UP 2) or (VIDEO Input 1 Terminal) Black Signal (SET UP 3)
EQUIPMENT		SPECIFICATION
Screwdriver (+), PC(2), Test Pattern Signal, (NTSC Video Pattern Generator)		Refer to Description below

Note:

This adjustment should be done in a darkroom.

Test Pattern Signal:

- Black Signal: "8 Black" in "1 Color"

SET UP 1:

1. Place the unit into Service Position (2).
2. Set to a desired mode except TV mode by pressing TV/VIDEO key on the remote.
3. No signal input.
4. Perform Light IN Polarizer (Green, Red and Blue) Adjustment as follows in order.

OR

SET UP 2:

1. Place the unit into Service Position (2).
2. Connect the PC (2) to the PC Input Terminal with the RGB cable.
3. Supply Black Signal and set to PC mode by pressing TV/VIDEO key on the remote.
4. Perform Light IN Polarizer (Green, Red and Blue) Adjustment as follows in order.

OR

SET UP 3:

1. Place the unit into Service Position (2).
2. Connect the NTSC Video Pattern Generator to the VIDEO Input 1 Terminal.
3. Supply Black Signal and set to VIDEO 1 mode by pressing TV/VIDEO key on the remote.
4. Perform Full Mirror (Green, Red, and Blue) Adjustment as follows in order.

Note:

Confirm that the picture will become black (not become bluish or reddish or greenish) after adjustment.

LIGHT IN POLARIZER GREEN ADJUSTMENT

1. Loosen a Screw (A) of the Light IN Polarizer Green Unit.
2. Move the Light IN Polarizer Green Unit to the right and left so that there is no green tint on the whole screen, and then tighten a Screw (A) (0.8-1.0 N·m).

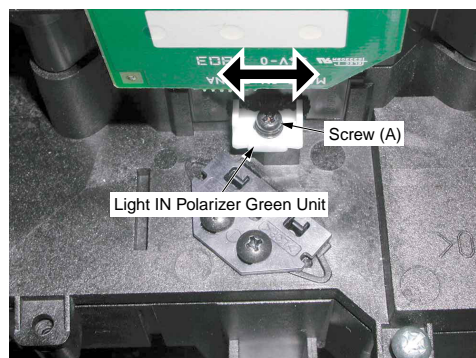


Fig. E4-1

LIGHT IN POLARIZER RED ADJUSTMENT

1. Loosen a Screw (B) of the Light IN Polarizer Red Unit.
2. Move the Light IN Polarizer Red Unit to the right and left so that there is no red tint on the whole screen, and then tighten a Screw (B) (0.8-1.0 N·m).

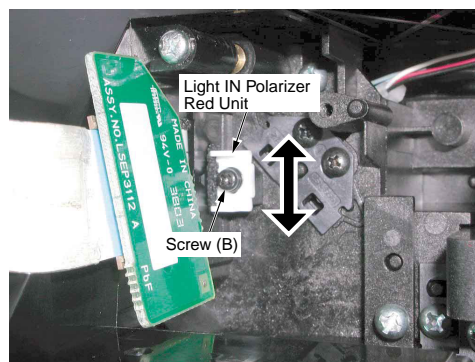


Fig. E4-2

LIGHT IN POLARIZER BLUE ADJUSTMENT

1. Loosen a Screw (C) of the Light IN Polarizer Blue Unit.
2. Move the Light IN Polarizer Blue Unit to the right and left so that there is no blue tint on the whole screen, and then tighten a Screw (C) (0.8-1.0 N·m).

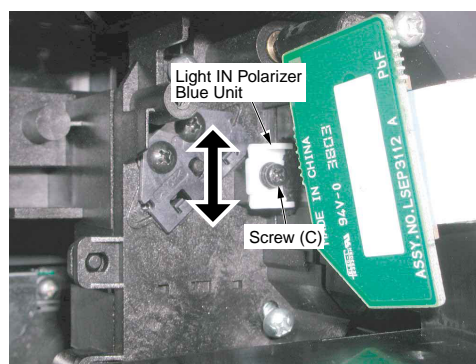


Fig. E4-3

LCD DRIVE P.C.B. ADJUSTMENT SECTION

SET UP for LCD Drive Adjustment software (Software (1)):

1. 1) Remove the Rear Cover Unit and open the power P.C.B./Power PCB Mount Metal.
- 2) Connect the PC (1) and CN2303 on the LCD Drive P.C.B. with the RS232C I/F Tool and the D-Sub 9 Pin Serial (RS232C) Cable.

<With Power P.C.B./Power PCB Mount Metal opened>

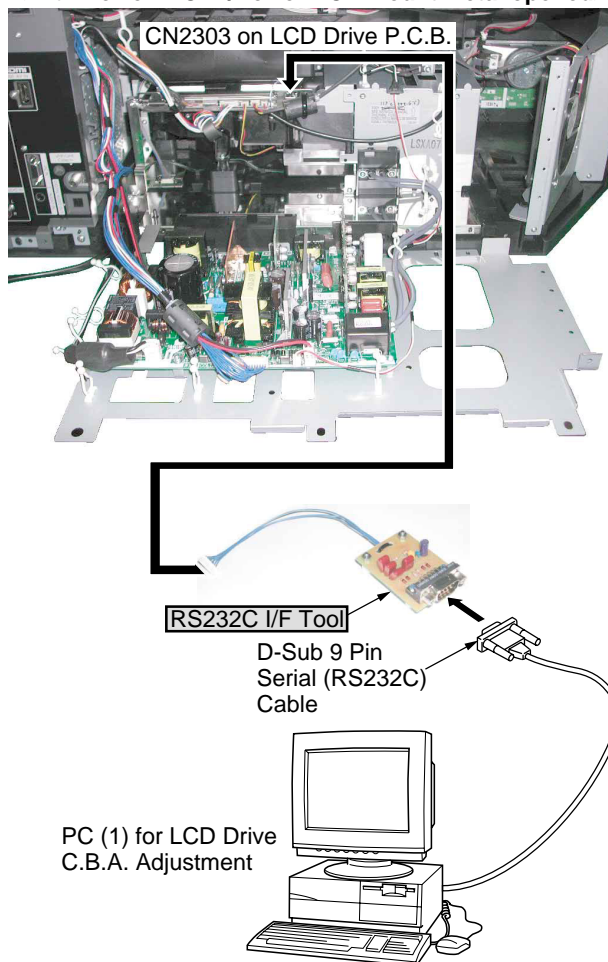


Fig. E5

2. Install the software (1) into the PC (1).

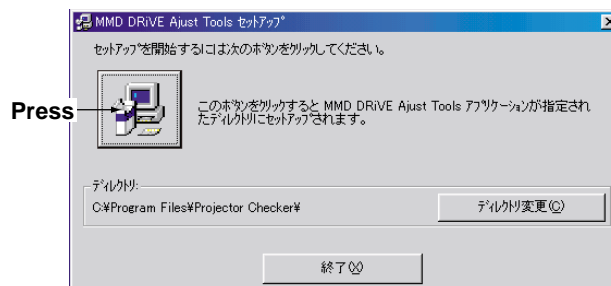
Note:

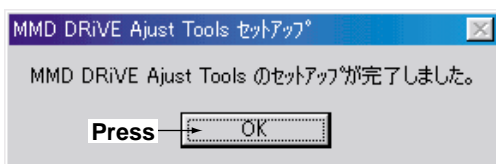
The PC (1) must have a 10-key keyboard.

- 1) Copy the "LCD Drive Adjustment software (6 items)" folder to any drive.

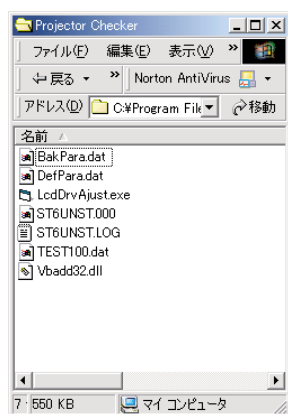
Application software	files
Software (1): LCD Drive Adjustment	LCDDrv1.CAB LCDDrv2.CAB LCDDrv3.CAB LCDDrv4.CAB setup.exe SETUP.LST

- 2) Execute the "setup.exe" to install.
- 3) Press the buttons in the following dialog boxes as shown.

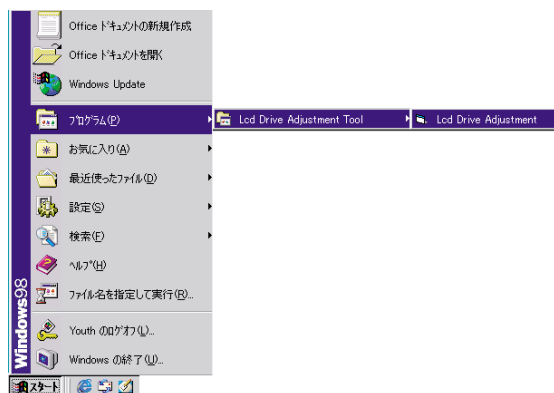




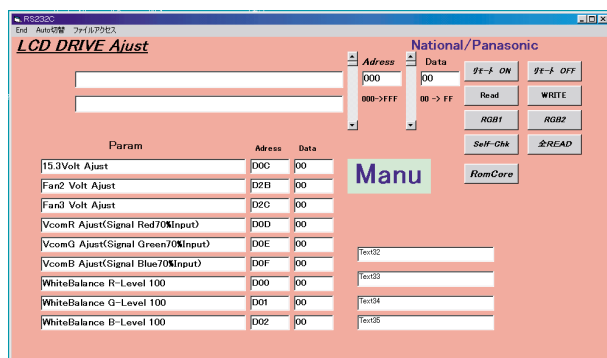
- 4) The following files will be created on "C:\Program Files\Projector Checker." Software (1) installation is complete.



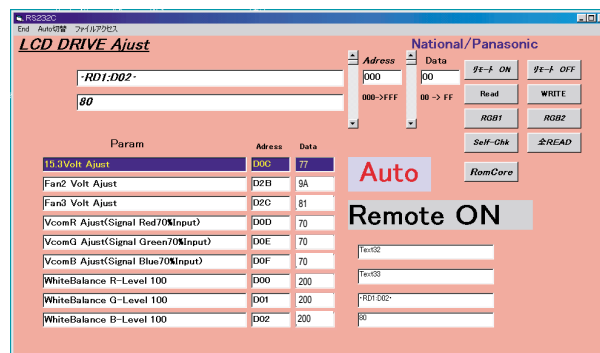
3. Turn on the unit power.
4. To start up the software (1), select the "LCD Drive Adjustment" on Program in Start menu. The start-up menu will appear.



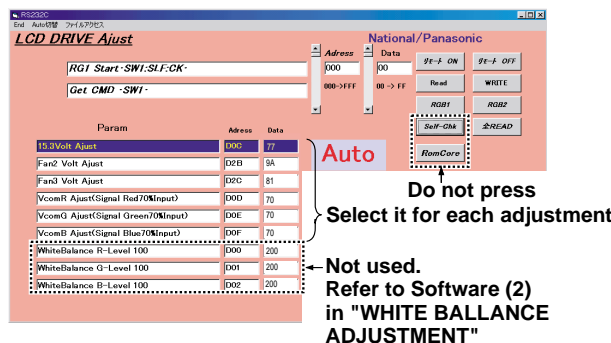
5. To turn the remote on, press DEL key.



6. "Manu" indication will change to "Auto" indication, and "Remote ON" indication will appear. Confirm NUMLOCK is on. If not, turn on NUMLOCK by pressing the NUMLOCK key on the 10-key keyboard.



7. Perform the necessary adjustment for the LCD Drive P.C.B.



8. After completing adjustments, turn the remote off by pressing DEL key. Then, close the software (1).

FAN 1 VOLTAGE ADJUSTMENT

Purpose:

To set the optimum rotation speed of the Fan 1.

Symptom of Misadjustment:

Temperature of the unit becomes too high or sound of the Fan 1 becomes loud.

TP	ADJ.	INPUT
CN2701 (Pin 1) or TP2742	15.3Volt Adjust	
EQUIPMENT		SPECIFICATION
PC(1), DVM (Digital Volt Meter)		+7.0 VDC±0.1 VDC

1. Connect the DVM (Digital Volt Meter) to CN2701 (Pin 1) on the LCD Drive P.C.B. after disconnecting the Connector Cable from Connector CN2701.
2. Select "15.3Volt Adjust" on menu by 2(↓), 8(↑) key on the 10-key keyboard.
3. Adjust "15.3Volt Adjust" by pressing 4(←), 6(→) key on the 10-key keyboard so that the voltage becomes +7.0 VDC±0.1 VDC.

FAN 3 VOLTAGE ADJUSTMENT

Purpose:

To set the optimum rotation speed of the Fan 3.

Symptom of Misadjustment:

Temperature of the unit becomes too high or sound of the Fan 3 becomes loud.

TP	ADJ.	INPUT
CN2703 (Pin 1) or TP2744	Fan3 Volt Adjust	
EQUIPMENT		SPECIFICATION
PC(1), DVM (Digital Volt Meter)		+7.0 VDC±0.05 VDC

1. Connect the DVM (Digital Volt Meter) to CN2703 (Pin 1) on the LCD Drive P.C.B. after disconnecting the Connector Cable from Connector CN2703.
2. Select "Fan3 Volt Adjust" on menu by 2(↓), 8(↑) key on the 10-key keyboard.
3. Adjust "Fan3 Volt Adjust" by pressing 4(←), 6(→) key on the 10-key keyboard so that the voltage becomes +7.0 VDC±0.05 VDC.

FAN 2 VOLTAGE ADJUSTMENT

Purpose:

To set the optimum rotation speed of the Fan 2.

Symptom of Misadjustment:

Temperature of the unit becomes too high or sound of the Fan 2 becomes loud.

TP	ADJ.	INPUT
CN2702 (Pin 1) or TP2743	Fan2 Volt Adjust	
EQUIPMENT		SPECIFICATION
PC(1), DVM (Digital Volt Meter)		+8.0 VDC±0.05 VDC

1. Connect the DVM (Digital Volt Meter) to CN2702 (Pin 1) on the LCD Drive P.C.B. after disconnecting the Connector Cable from Connector CN2702.
2. Select "Fan2 Volt Adjust" on menu by 2(↓), 8(↑) key on the 10-key keyboard.
3. Adjust "Fan2 Volt Adjust" by pressing 4(←), 6(→) key on the 10-key keyboard so that the voltage becomes +8.0 VDC±0.05 VDC.

VCOM ADJUSTMENT

Purpose:

To set the optimum LCD common voltage.

Symptom of Misadjustment:

The picture will be flickering.

TP	ADJ.	INPUT
	Vcom R Adjust	(PC Input Terminal) 70 % Red Horizontal Signal
	Vcom G Adjust	(PC Input Terminal) 70 % Green Horizontal Signal
	Vcom B Adjust	(PC Input Terminal) 70 % Blue Horizontal Signal
EQUIPMENT		SPECIFICATION
PC(1)/(2), Test Pattern Signal or PC(1) with 720p video graphics card		Refer to Description below

CAUTION:

This method is for use with PC which has a 720p video graphics card to output the Test Pattern Signal.

Test Pattern Signal:

- 70 % Red Horizontal Signal: "2 Red 70 %" in "2 Horizontal" of "3 Phase"
- 70 % Green Horizontal Signal: "3 Green 70 %" in "2 Horizontal" of "3 Phase"
- 70 % Blue Horizontal Signal: "4 Blue 70 %" in "2 Horizontal" of "3 Phase"

SET UP:

1. Connect the PC(2) to the PC Input Terminal with the RGB Cable.
2. Set to PC mode by pressing TV/VIDEO key on the remote.
3. Supply 70% Red Horizontal signal. (PC (2) output should be **720p resolution (1280 x 720).**)

Note:

A Desk Top PC with a video graphics card compatible with 720p resolution must be used.

4. Set to "Dynamic Iris Off" of Adv. adjust in Picture Menu. (Or, disconnect Connector CN9502 on the Iris P.C.B.)

PROCEDURES:

1. Select "Vcom R Adjust" in software (1) menu by 2(↓), 8(↑) key on the 10-key keyboard.
2. Adjust "Vcom R Adjust" by pressing 4(←), 6(→) key on the 10-key keyboard so that there are no flicker on the whole screen.
3. Supply 70% Green Horizontal signal.
4. Then, select "Vcom G Adjust" in software (1) menu.
5. Adjust "Vcom G Adjust" by pressing 4(←), 6(→) key on the 10-key keyboard so that the flicker on the whole screen becomes minimum and uniformity.
6. Supply 70% Blue Horizontal signal.
7. Then, select "Vcom B Adjust" in software (1) menu.
8. Adjust "Vcom B Adjust" by pressing 4(←), 6(→) key on the 10-key keyboard so that the flicker on the whole screen becomes minimum and uniformity.
9. Then, end the software (1).

WHITE BALANCE ADJUSTMENT

Note:

- Be sure to perform the White Balance Adjustment after the power has been on for more than 10 minutes so that color temperature is stable.
- This adjustment should be done in a darkroom.

Purpose:

To set the standard white level for each color temperature.

Symptom of Misadjustment:

The white color of picture will become bluish or reddish.

TP	ADJ.	INPUT
	Hi Data Lo Data	(PC Input Terminal) Gray Scale Pattern Signal (16 scales) or (VIDEO Input 1 Terminal) Gray Scale Pattern Signal (10 scales)
EQUIPMENT		SPECIFICATION
PC(1)/(2), Test Pattern Signal, NTSC Video Pattern Generator		Refer to Description below

Test Pattern Signal:

- Gray Scale Pattern Signal (16 scales): "1 White 16 grade (Horiz)" in "Bar Reverse"

SET UP for LCD Drive Adjustment software (Software (2)):

- Copy the "FFF_2006D" folder to any drive on the PC (1).
- Execute the "Vcom_2006.exe."
- To turn the remote on, press DEL key.
- "Manu" indication will change to "Auto" indication, and "Remote ON" indication will appear.

Input data for WB adjustment

	Hi Data	Lo Data
Default	02	00
Range	00 ~ 03	00 ~ FF

- After completing WB Adjustment, turn the remote off by pressing DEL key. Then, close the software (2).

Rough Adjustment:

(Rough adjustment by PC signal : Determined visually)

- Connect the PC(2) to the PC Input Terminal with the RGB Cable.
- Set to PC mode by pressing TV/VIDEO key on the remote.
- Set to "Dynamic Iris Off" of Adv. adjust in Picture Menu. (Or, disconnect Connector CN9502 on the Iris P.C.B.)
- Supply Gray Scale Pattern Signal (16 scales) from PC(2).
- Select "Hi Data" on menu with mouse, input a 2-byte value (00~03) to "Hi Data."
- Select "Lo Data" on menu with mouse, input a 2-byte value (00~FF) to "Lo Data."

Note for inputting data:

When inputting "Hi Data" and "Lo Data" data, it is recommended to adjust by increasing or decreasing from the Default value (Hi Data: 02, Lo Data: 00).

- Then, press "2Byte Set A" or "2Byte Set C" to transmit the White Balance Red data or Blue data.
- Repeating above steps 5~7, adjust White Balance Red and Blue so that the area around the 14th and 16th scale (A) becomes pure gray with no red or blue tint.

Gray Scale Pattern Signal (16 scales)

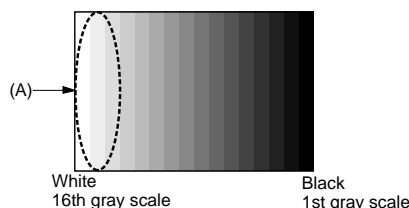


Fig. E6-1

Note:

Adjust viewing in scale (A) although, the white color of the entire screen changes.

(Rough adjustment by video signal : Determined visually)

- Connect the NTSC Video Pattern Generator to the VIDEO Input 1 Terminal.
- Set to VIDEO 1 mode by pressing TV/VIDEO key on the remote.
- Set to "Dynamic Iris Off" of Adv. adjust in Picture Menu. (Or, disconnect Connector CN9502 on the Iris P.C.B.)
- Supply Gray Scale Pattern Signal (10 scales).
- Select "Hi Data" on menu with mouse, input a 2-byte value (00~03) to "Hi Data."
- Select "Lo Data" on menu with mouse, input a 2-byte value (00~FF) to "Lo Data."

Note for inputting data:

When inputting "Hi Data" and "Lo Data" data, it is recommended to adjust by increasing or decreasing from the Default value (Hi Data: 02, Lo Data: 00).

- Then, press "2Byte Set A" or "2Byte Set C" to transmit the White Balance Red data or Blue data.
- Repeating above steps 5~7, adjust White Balance Red and Blue so that the area around the 14th and 16th scale (A) becomes pure gray with no red or blue tint.

Gray Scale Pattern Signal (10 scales)

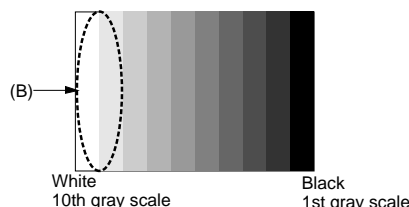


Fig. E6-2

Note:

Adjust it with viewing in scale (B) though, the white color of whole screen changes.

Fine Adjustment:

TP	ADJ.	INPUT
	Hi Data Lo Data	(PC Input Terminal) 50 % White Pattern Signal 100 % White Pattern Signal
EQUIPMENT		SPECIFICATION
PC(1)/(2), Test Pattern Signal, Color Temperature Meter		Refer to Description below

Test Pattern Signal:

- 50 % White Pattern Signal: "9 Gray" in "1 Color"
- 100 % White Pattern Signal: "1 White" in "1 Color"

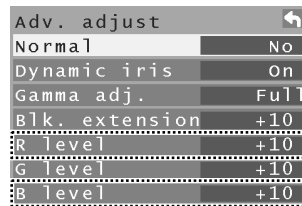
1. Connect the PC(2) to the PC Input Terminal with the RGB Cable.
2. Set to PC mode by pressing TV/VIDEO key on the remote.
3. Set to "Dynamic Iris Off" of Adv. adjust in Picture Menu.
(Or, disconnect Connector CN9502 on the Iris P.C.B.)
4. Supply 50 % White Pattern Signal from PC(2).
5. Select "Hi Data" on menu with mouse, input a 2-byte value (00~03) to "Hi Data."
6. Select "Lo Data" on menu with mouse, input a 2-byte value (00~FF) to "Lo Data."
7. Then, press "2Byte Set A" or "2Byte Set C" to transmit the White Balance Red data or Blue data.
8. Repeating above steps 5 ~ 7, adjust White Balance Red and Blue so that the color temperature (K) and its deviation (uv) in the center of the screen are 9600 K to 11800 K, and -0.018 uv to -0.002 uv respectively using a Color Temperature Meter.
9. Supply 100 % White Pattern Signal from PC(2).
10. Confirm that the color temperature (K) and its deviation (uv) in the center of the screen are 8100 K to 13800 K, and -0.011 uv to +0.007 uv respectively using a Color Temperature Meter.
11. If OK, close the software (2).
If NG, repeat steps 4 through 10 until color temperature (K) and its deviation (uv) are within specification.

ALTERNATIVE METHOD FOR WHITE BALANCE ADJUSTMENT

1. Press MENU key in normal condition.
2. Press CH UP/DOWN key and select "Picture."
Then, press OK key.
3. Press CH UP/DOWN key and select "Adv. adjust"
Then, press OK key.
4. Adjust "R level" and "B level".

Note:

This adjustment data will be written to EEPROM on the Main P.C.B.



← Adjust the red component.

← Adjust the blue component.

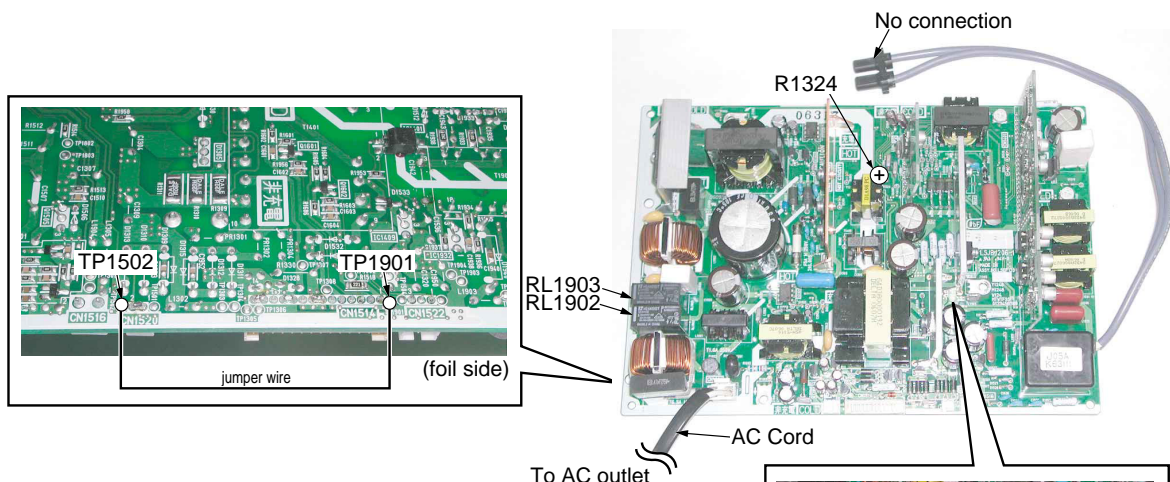
POWER ADJUSTMENT

REG9V Adjustment

After replacing the Power Control 1 P.C.B., perform this adjustment.

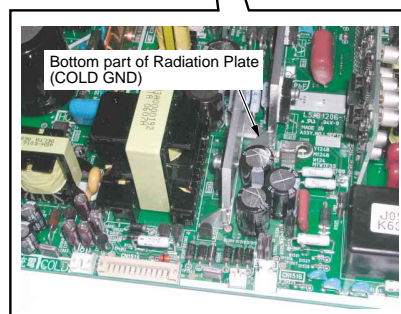
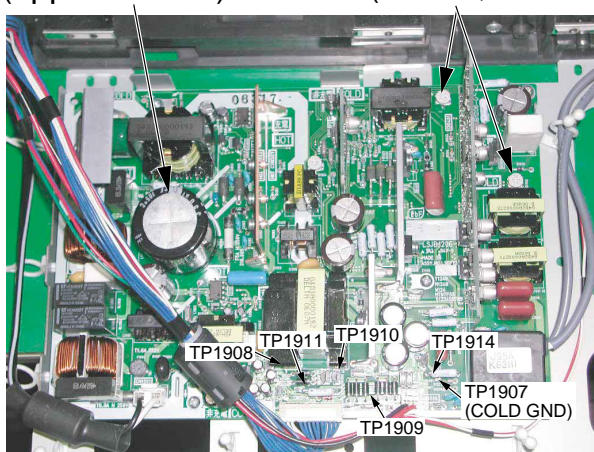
PROCEDURES:

1. Disconnect all connector cables on the Power P.C.B., then take out the Power P.C.B. from the unit.
2. Solder a jumper between TP1502 and TP1901 on the Power P.C.B.
3. Plug in the AC Cord.
4. Connect the DVM (Digital Volt Meter) to TP1909 on the Power P.C.B.
(Use TP1907 or bottom part of Radiation Plate for COLD circuit as GND.)
5. Adjust R1324 so that the voltage is $9.0\text{ V} \pm 0.2\text{ V}$.
6. Unplug the AC Cord. Remove the jumper wire between TP1502 and TP1901 on the Power P.C.B.
7. Reassembly the Power P.C.B. by connecting all connector cables, leave the Power P.C.B./Power Support Angle open.
8. Plug in the AC Cord and turn on the unit power.
9. Check the voltage at the following points.
(Use TP1907 or bottom part of Radiation Plate for COLD circuit as GND.)
TP1908: approx. $7.0\text{ V} \pm 0.5\text{ V}$ (STBY+7V)
TP1909: approx. $9.0\text{ V} \pm 0.5\text{ V}$ (REG+9V)
TP1910: approx. $31.0\text{ V} \pm 1.0\text{ V}$ (DT+30V)
TP1911: approx. $17.0\text{ V} \pm 0.5\text{ V}$ (DRV+17V)
TP1914: approx. $17.0\text{ V} \sim 22.0\text{ V}$ (AMP+18V)
10. If NG, re-adjust. Perform steps 1 ~ 9.



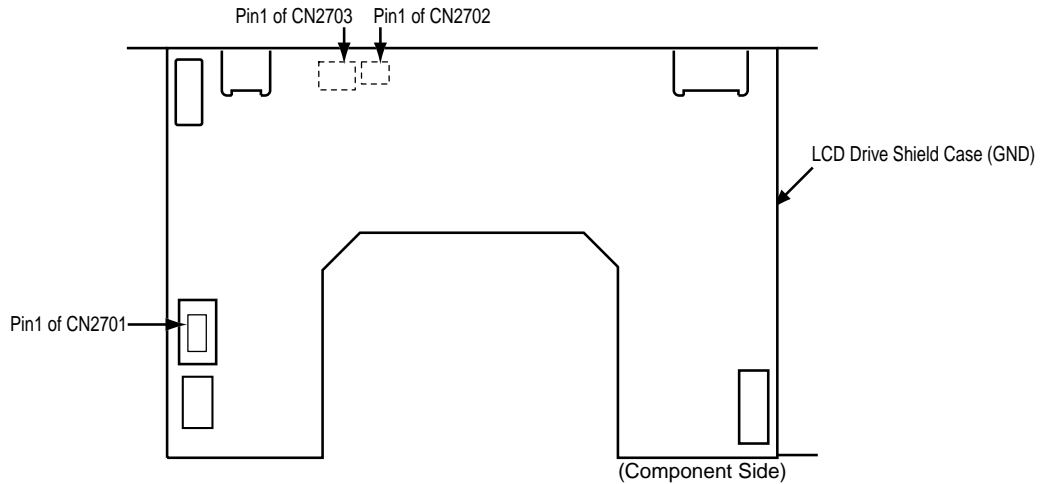
C1810:
High voltage generated. (approx. 400 V)

Note:
Do not turn or adjust VRs (R1703, R1951).

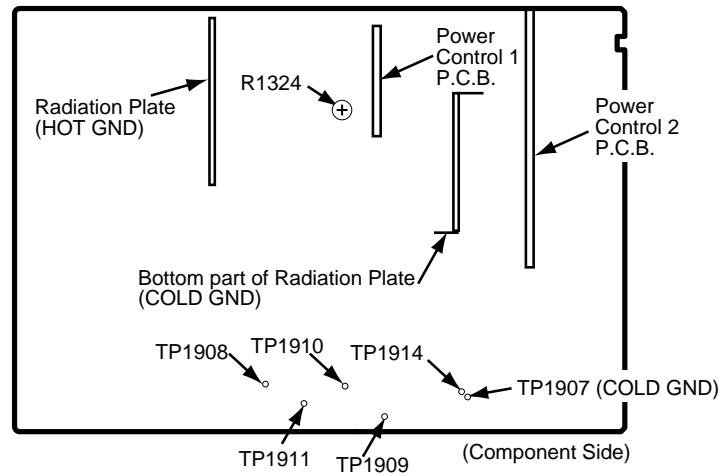


TEST POINTS AND LOCATION

LCD Drive P.C.B.



Power P.C.B.



Test Point Information

- Test Point with a Test Pin.
- ① Test Point with a jumper wire across a hole in the P.C.B.
- Test Point with no Test Pin.
- Test Point with a Hook.

11 Maintenance

11.1. Cleaning Methods

THE SCREEN UNIT AND THE MIRROR

- THE SCREEN UNIT (Lenticular Screen, Fresnel Lens)

It is strongly recommended that the Lenticular Screen surface (outside) and the Fresnel Lens surface (inside) should be wiped gently with a clean, soft, dry cloth to remove the dirt.

Note:

1. If the dirt cannot be removed by wiping with a clean, soft, dry cloth, use a clean, soft, dry cloth moistened with diluted neutral pH liquid cleanser or a lens cleaner (usually containing a small amount of ethyl alcohol) and wipe lightly. Take care not to leave any streaks. Do not use cleaning materials containing methyl alcohol, acetone, or dichloromethane.
2. Use an air blower to clean the inner surface of the Lenticular Screen and the outer surface of the Fresnel Lens (the surfaces that one another). These surfaces must not be wiped with a cloth.

- THE MIRROR

Remove any dirt with an air blower or wipe with a clean, soft, dry cloth. If wiped too forcefully, the surface of the Mirror can be damaged. If wiping with a clean, dry cloth does not remove the dirt, the Mirror must be replaced.

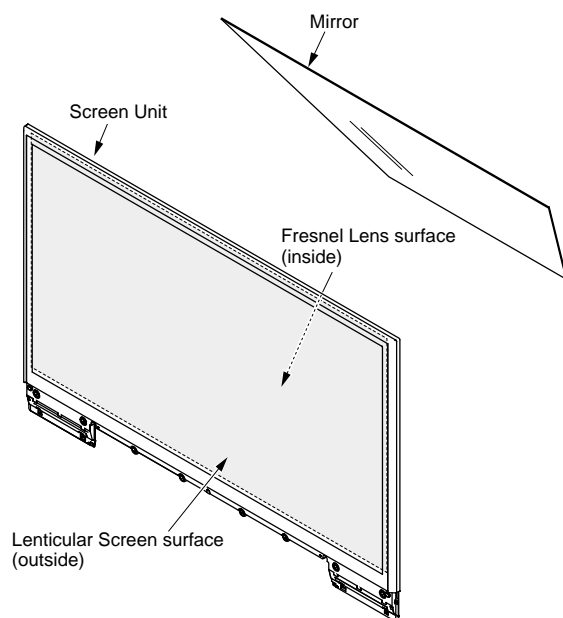


Fig. 6-1

THE LAMP

Gently wipe the surface of the glass of the Lamp with cleaning paper or soft cloth.

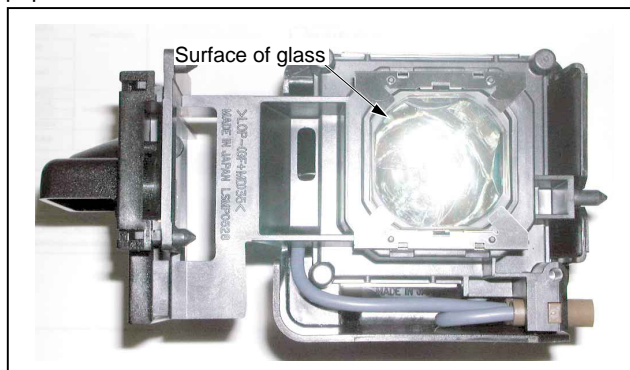


Fig. 6-2

THE FILTER ON THE PROJECTION UNIT

CAUTION:

Operating with torn or damaged Air Filter may cause damage to the Projection unit.

Remove the Projection Unit from rear. Then, clean the filters on the Projection Unit. Gently remove any accumulated dust from filter with a vacuum cleaner; use extreme care so as not to damage or tear the filters.

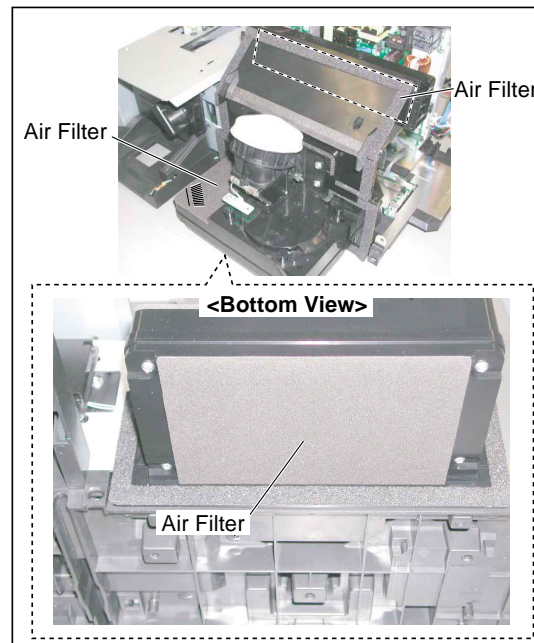


Fig. 6-3

THE PROJECTION LENS

Use lens cleaning paper and cleaner available at your local camera shop, etc. Dampen the cleaning paper with cleaner and gently wipe the surface of the lens from the center outward to remove dust.

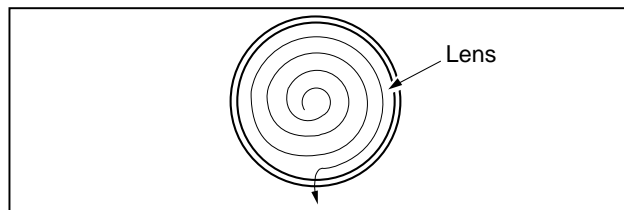


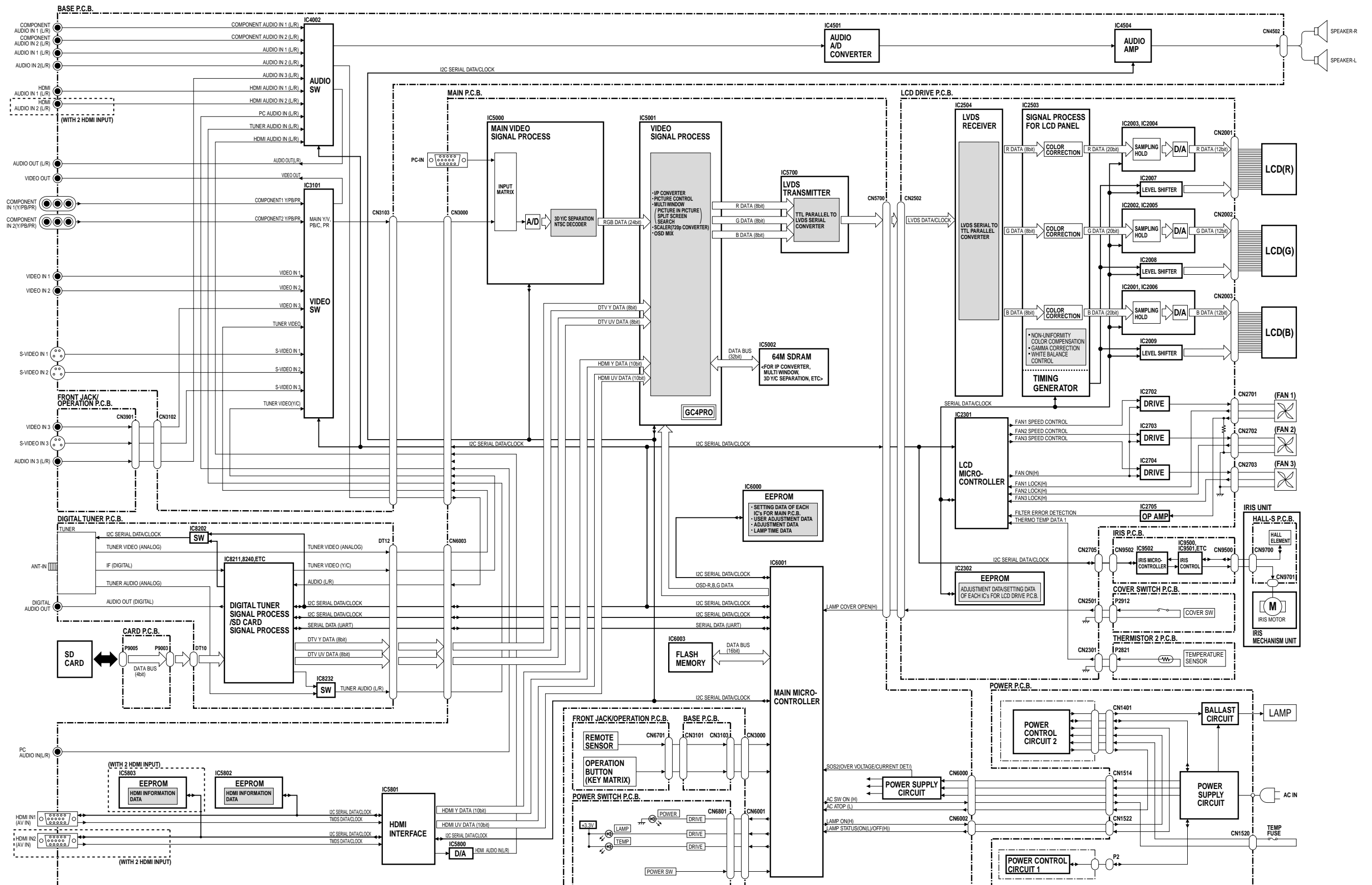
Fig. 6-4

THE LCD PANEL OF THE LCD/PRISM UNIT

- 1) Clean the surface of the LCD Panel of the LCD/Prism Unit with an air blower or wipe with a clean, or soft blush lightly.
- 2) If any dirt remains, lightly wipe the surface with a cotton swab moistened with pure ethyl alcohol or a lens cleaner which contains no water or oil. Use a new swab after each wiping so that dirt will not be re-deposited on the surface.

12 Block Diagrams

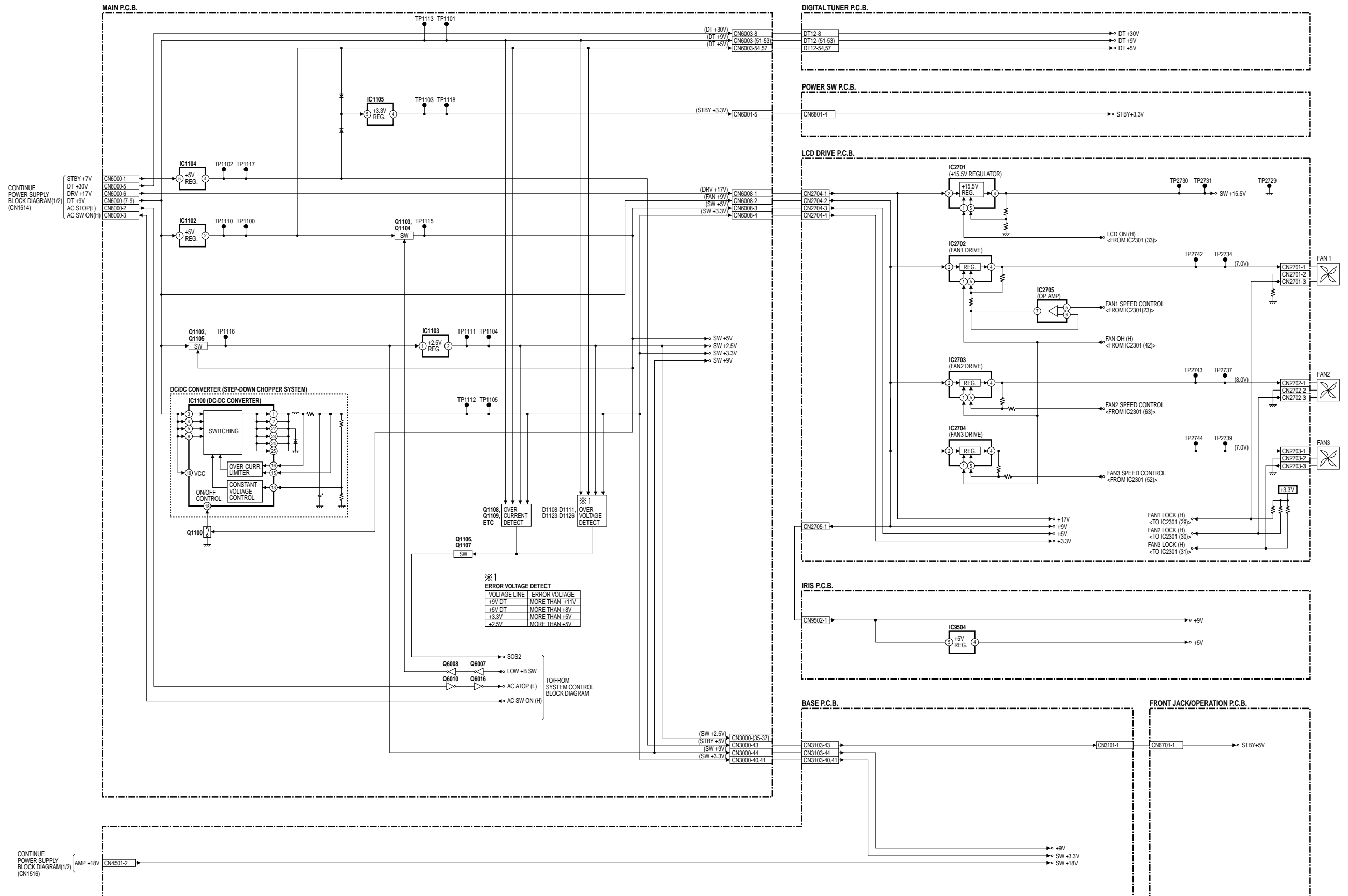
OVERALL BLOCK DIAGRAM



OVERALL BLOCK DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

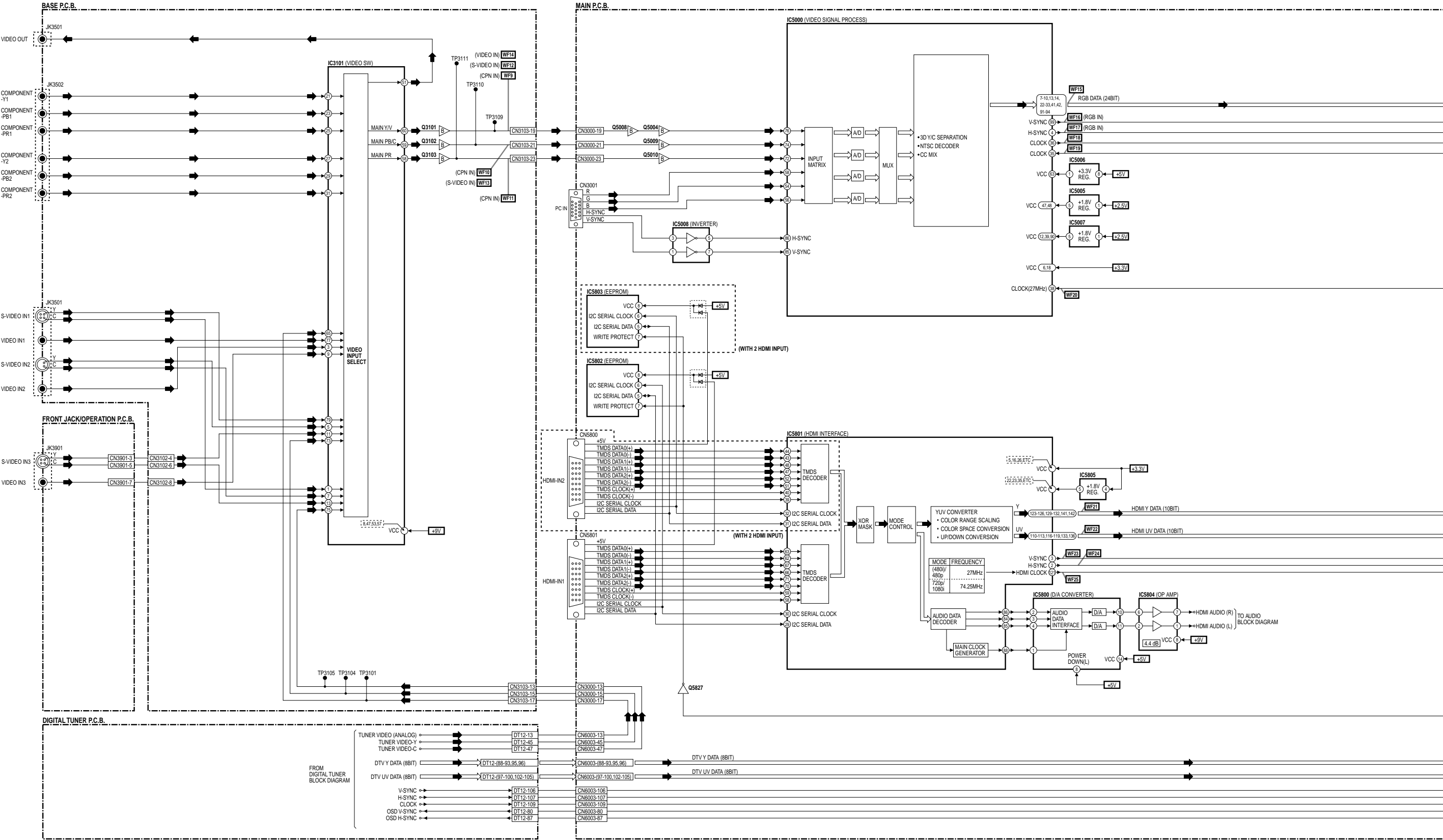
POWER SUPPLY BLOCK DIAGRAM (2/2)



POWER SUPPLY BLOCK DIAGRAM (2/2)

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

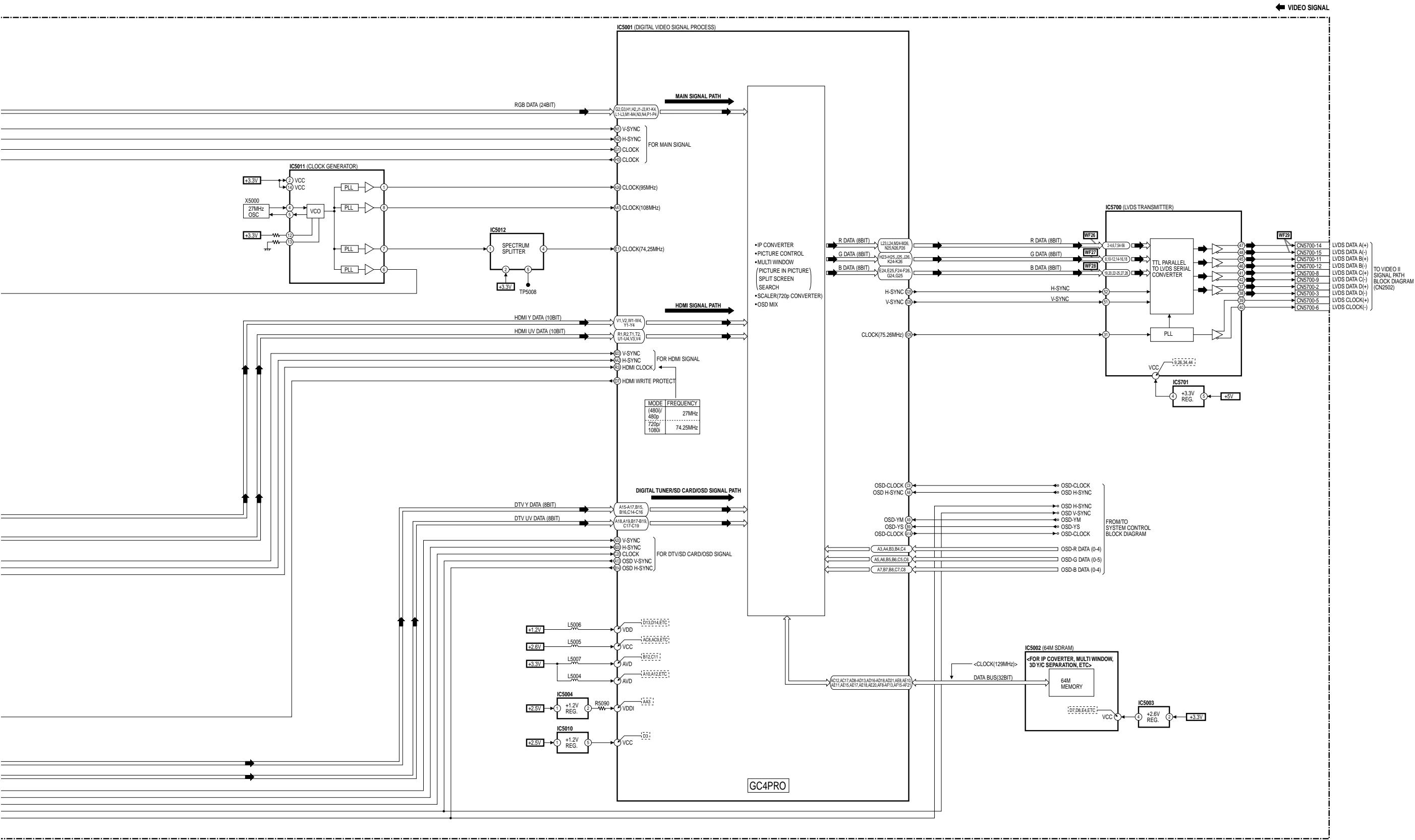
VIDEO SIGNAL PATH I BLOCK DIAGRAM (1/2)



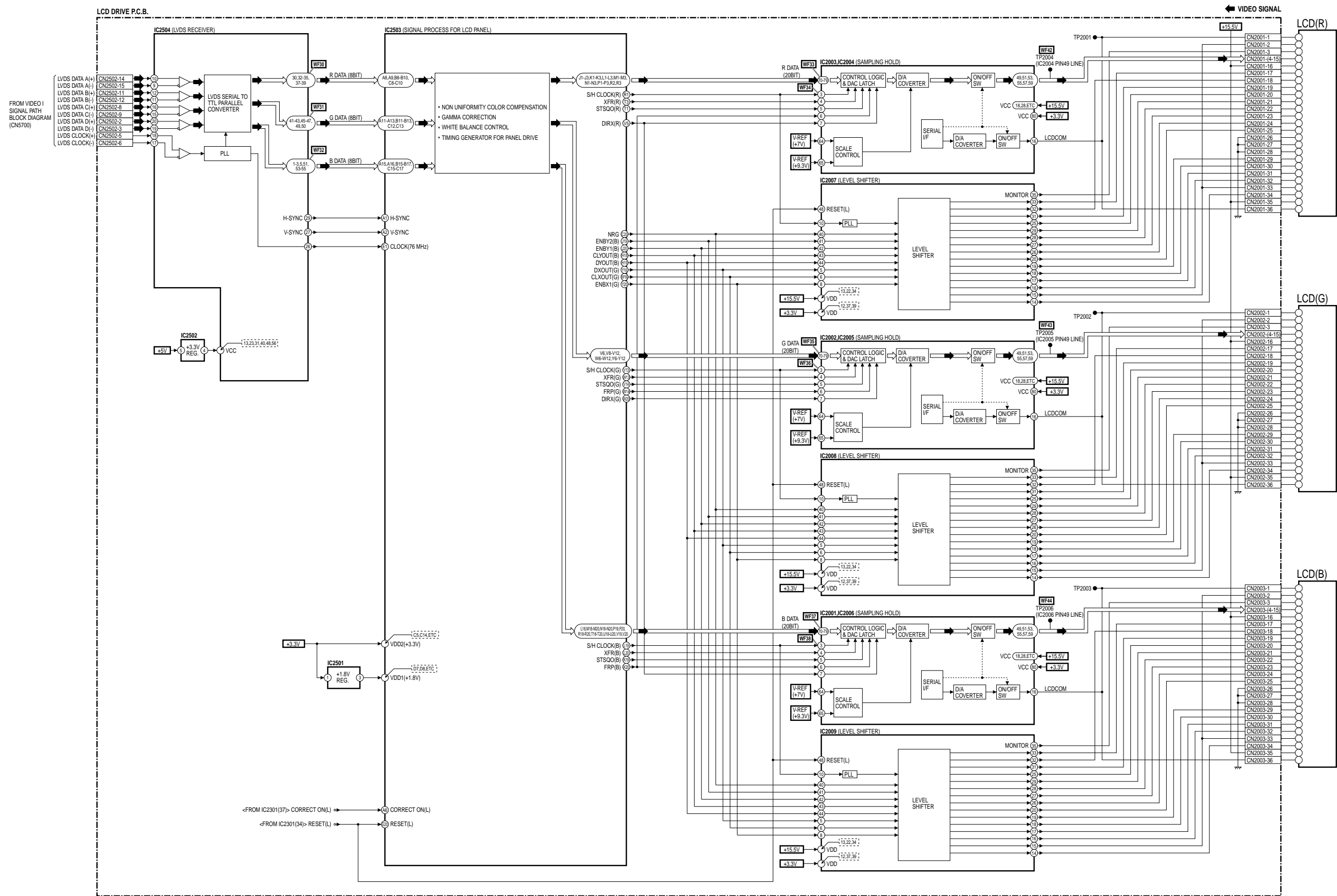
VIDEO SIGNAL PATH I BLOCK DIAGRAM (1/2)

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

VIDEO SIGNAL PATH I BLOCK DIAGRAM (2/2)



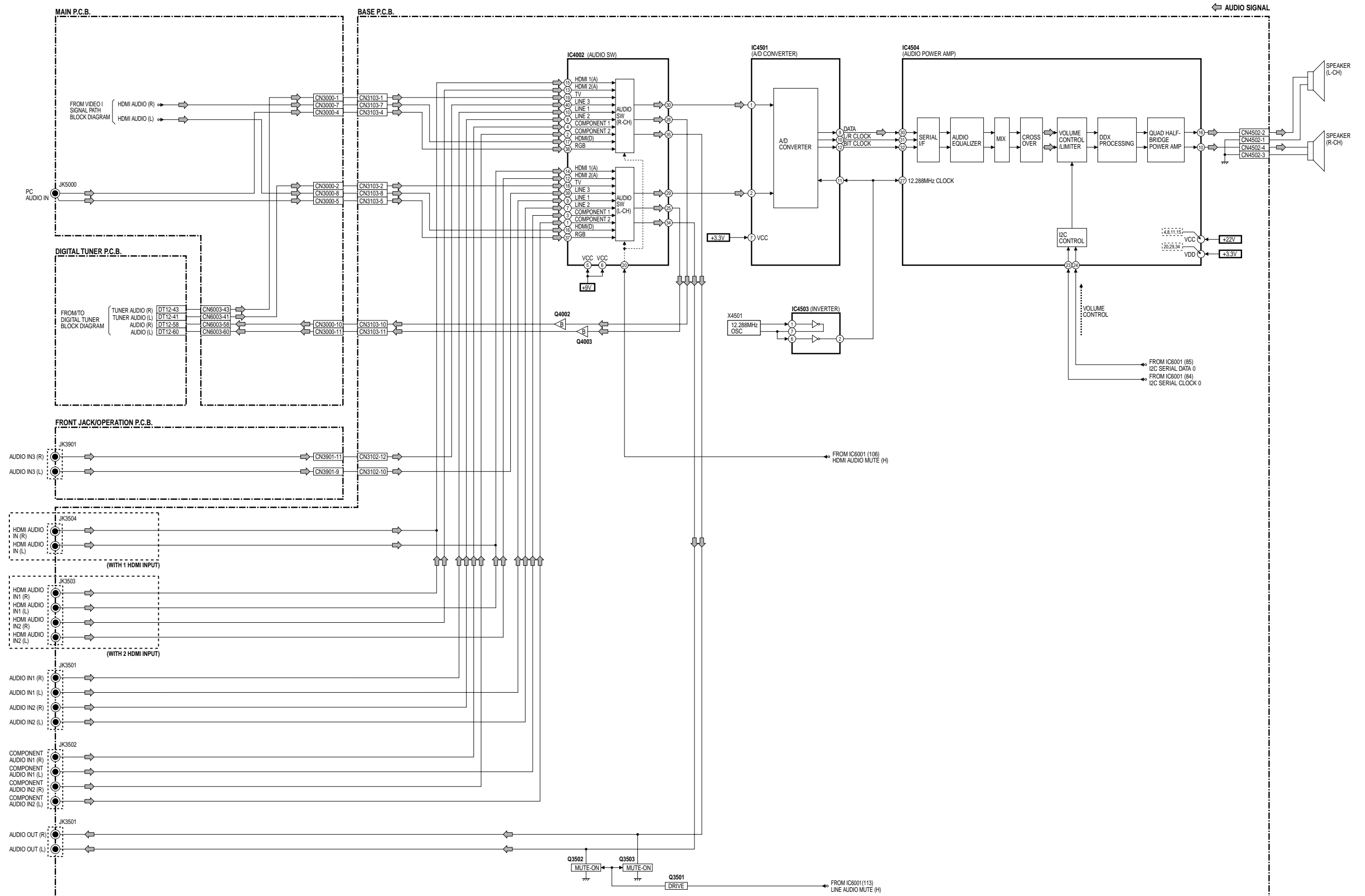
VIDEO SIGNAL PATH II BLOCK DIAGRAM



VIDEO SIGNAL PATH II BLOCK DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

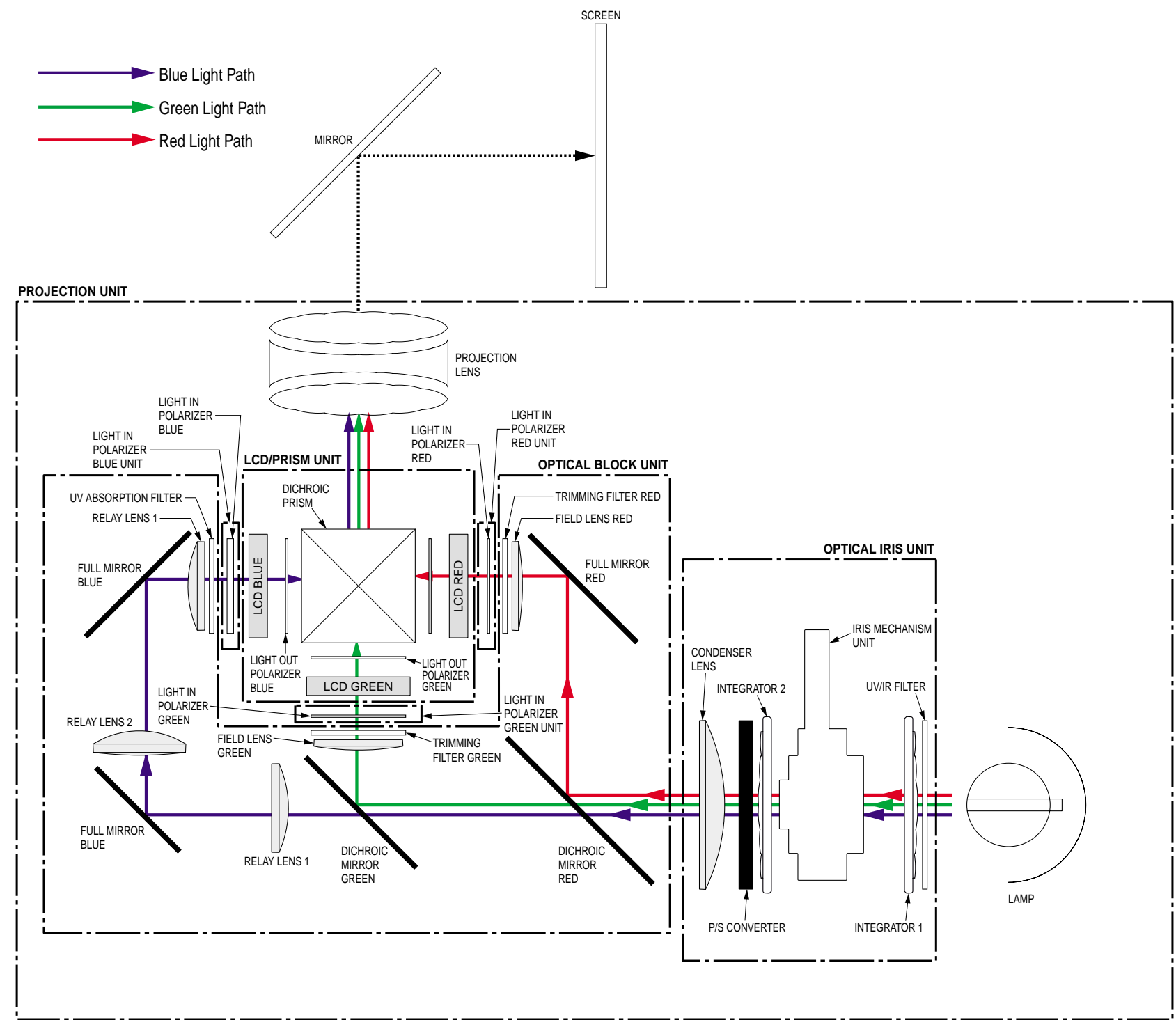
AUDIO SIGNAL PATH BLOCK DIAGRAM



AUDIO SIGNAL PATH BLOCK DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

OPTICAL BLOCK DIAGRAM



13 Schematic Diagrams

13.1. SCHEMATIC DIAGRAM & CIRCUIT BOARD LAYOUT NOTES

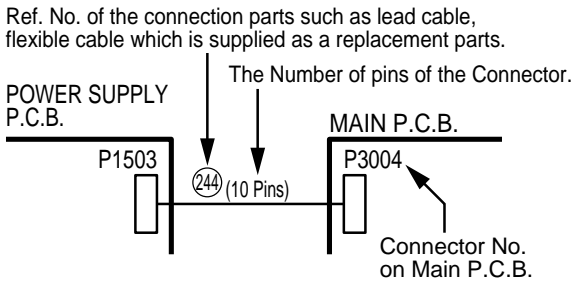
1. **Important safety notice**
Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components. Use only the specified parts.
2. Do not use the part number shown on this drawing for ordering.
The correct part number and part value is shown in the parts list, and may be slightly different or amended since this drawing was prepared.
3. Use only original replacement parts:
To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.
4. Parts different in shape or size may be used.
However, only interchangeable parts will be supplied as service replacement parts.
5. Test point information
● : Test point with a jumper wire across a hole in P.C.B.
○ : Test point with no test pin.

Schematic Diagram Notes

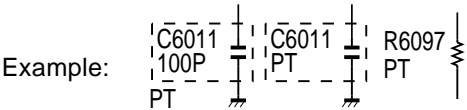
1. Indication for Zener Voltage of Zener Diodes
The Zener Voltage of Zener Diodes are indicated as such on Schematic Diagrams.

Example:
(6.2V).....Zener Voltage
2. How to identify Connectors
Each connector is labeled with a Connector No. and Pin No. Indicating what it is connected to, in other words, its counter part.
Use the interconnection schematic diagram to find the connection between associated connectors.

Example:
The connections between P.C.B.s are shown below.



3. Parts marked "PT" are not used in any models included in this service model.



4. Jumper wires are used for WA10, WA5 etc and these are not supplied as replacement parts.

Circuit Board Layout Note

Circuit Board Layout shows components installed for various models.
For proper parts content for the model you are servicing, please refer to the schematic diagram and parts list.

NOTE:
Circuit Board Layout includes components which are not used.

Base P.C.B. replacement note:

The Base P.C.B. has been changed on a running change basis. When servicing, please first check suffix (version) number on the Base P.C.B. component side.

Model No. Identification Mark

COMPARISON CHART OF MODELS & MARKS	
MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
Not Used	PT

Note : Refer to item 3 of Schematic Diagram Notes for mark "PT".

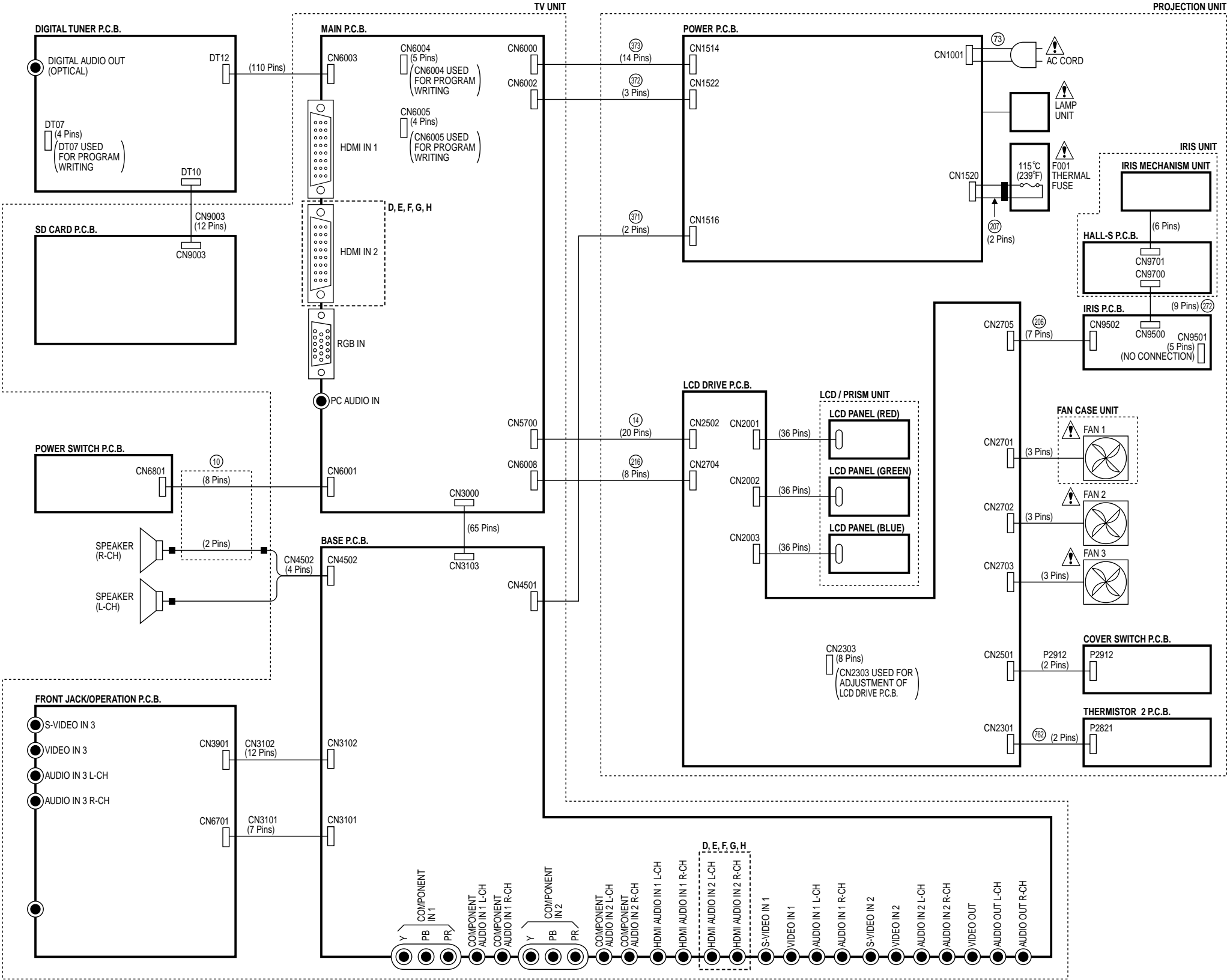
13.2. INTERCONNECTION SCHEMATIC DIAGRAM

INTERCONNECTION SCHEMATIC DIAGRAM

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
THE LAMP UNIT IS NOT SUPPLIED AS A REPLACEMENT PART.
WHEN REPLACING, REPLACE THE LAMP UNIT WHICH IS
SUPPLIED AS A OPTIONAL ACCESSORY.



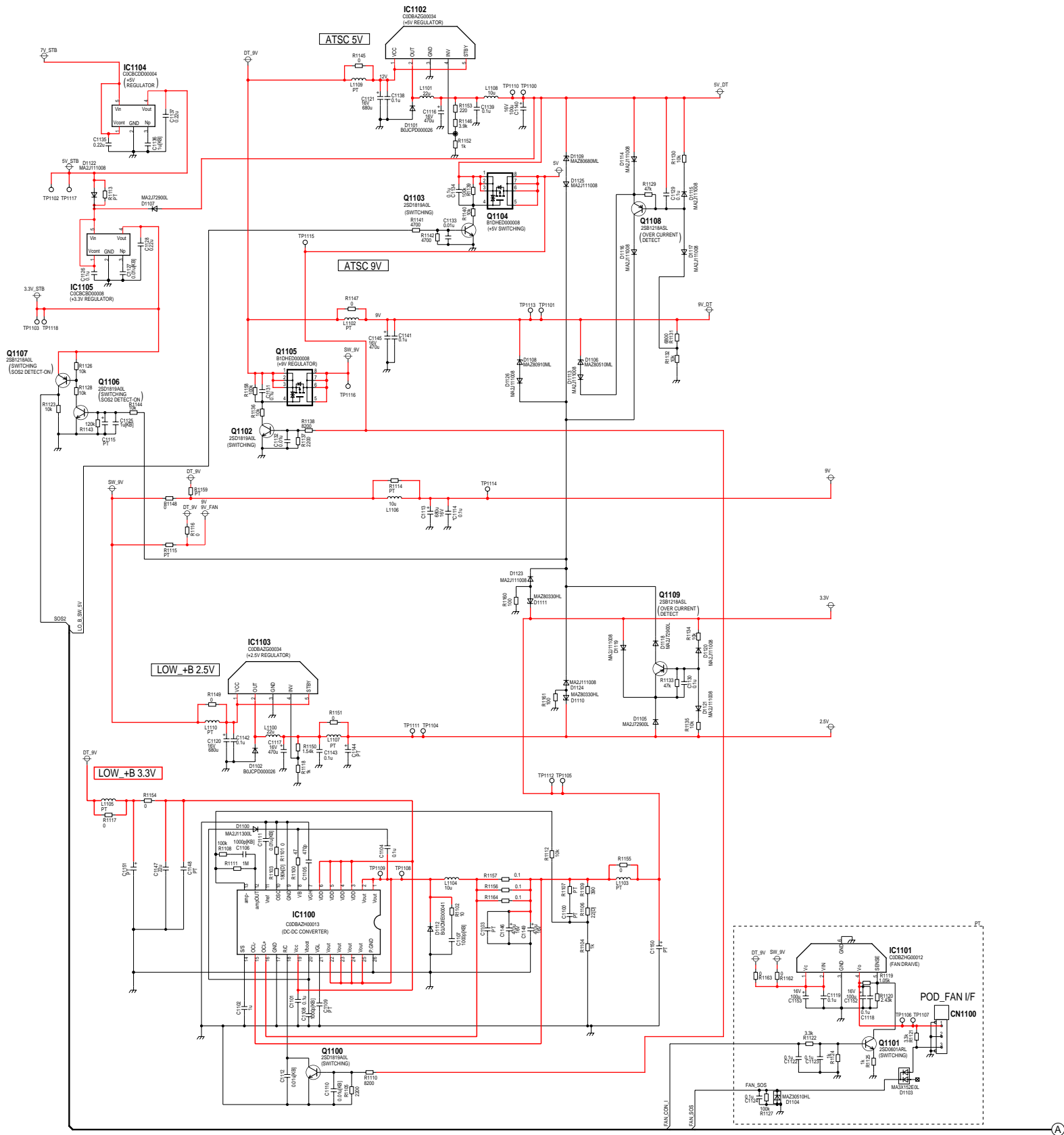
COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
Not Used	PT

INTERCONNECTION SCHEMATIC DIAGRAM
PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16
/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

13.3. MAIN SCHEMATIC DIAGRAMS

MAIN I SCHEMATIC DIAGRAM



NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

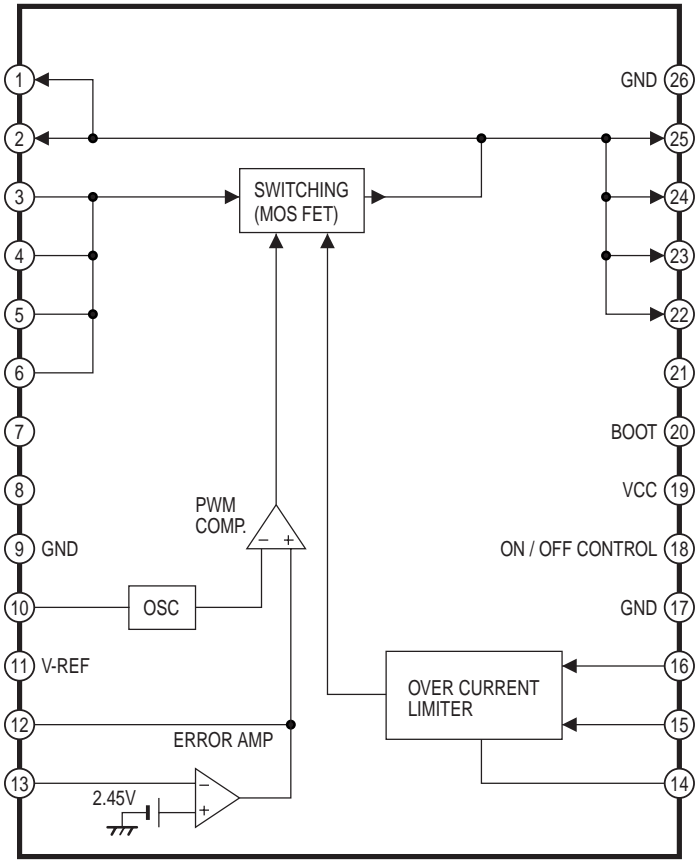
NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: PARTS MARKED "PT" ARE NOT USED.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
Not Used	PT

IC1100 DETAIL BLOCK DIAGRAM

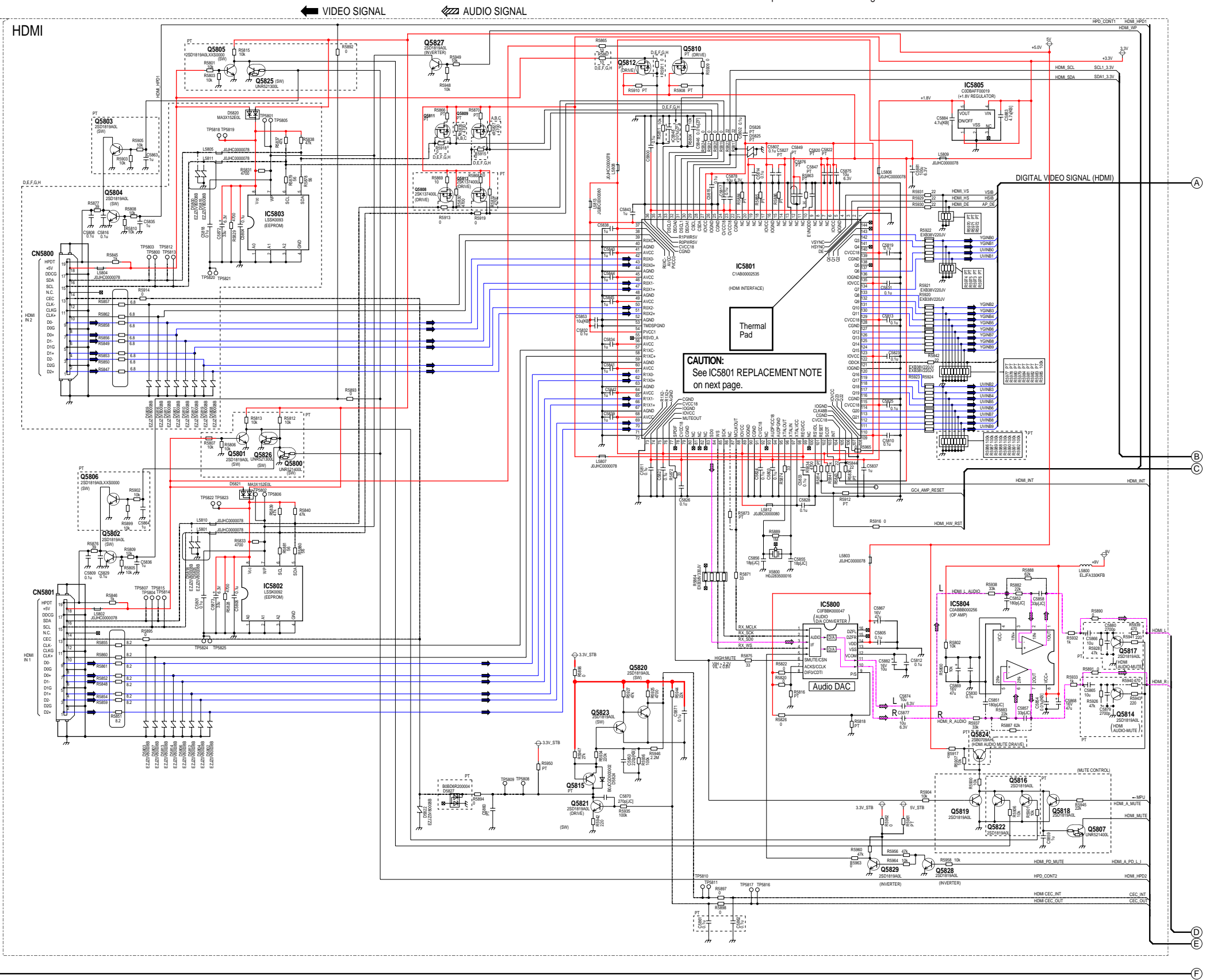


LINK TO VOLTAGE CHART

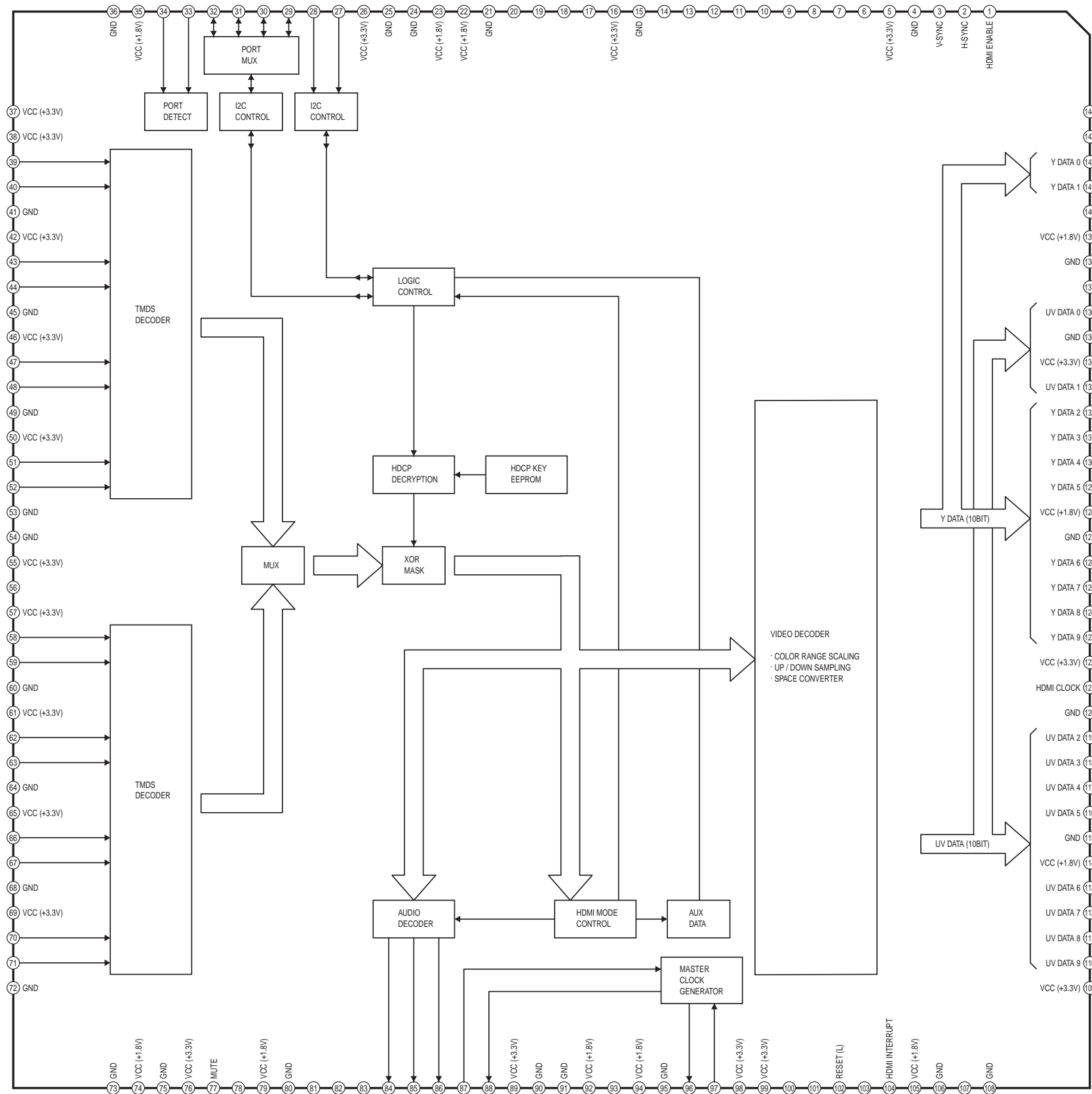
LSJB3211

MAIN I SCHEMATIC DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K



IC5801 DETAIL BLOCK DIAGRAM



IC5801 REPLACEMENT NOTE

CAUTION:
Whenever IC5801 is replaced, record the BKS_V number in the BKS_V list along with the serial number of the set.

BKS_V list (example)

Date	Serial number	BKS _V number
4/25/2006	H6AA50050	B03A59CD66

To display the BKS_V number:
1) Press the TV/VIDEO key on the remote to select the HDMI input in power on condition. Then, turn off the power.
2) Enter the Service Mode.
3) Connect the HDMI interface to the HDMI input terminal.
Note: When using the DVI interface, a DVI-HDMI conversion cable (e.g., TY-SCH03DH: sold by Panasonic) can be used.
4) Input signal from the HDMI interface. Then, the BKS_V number will be displayed and switched to new one.

```
SERVICE MODE 1 / 4

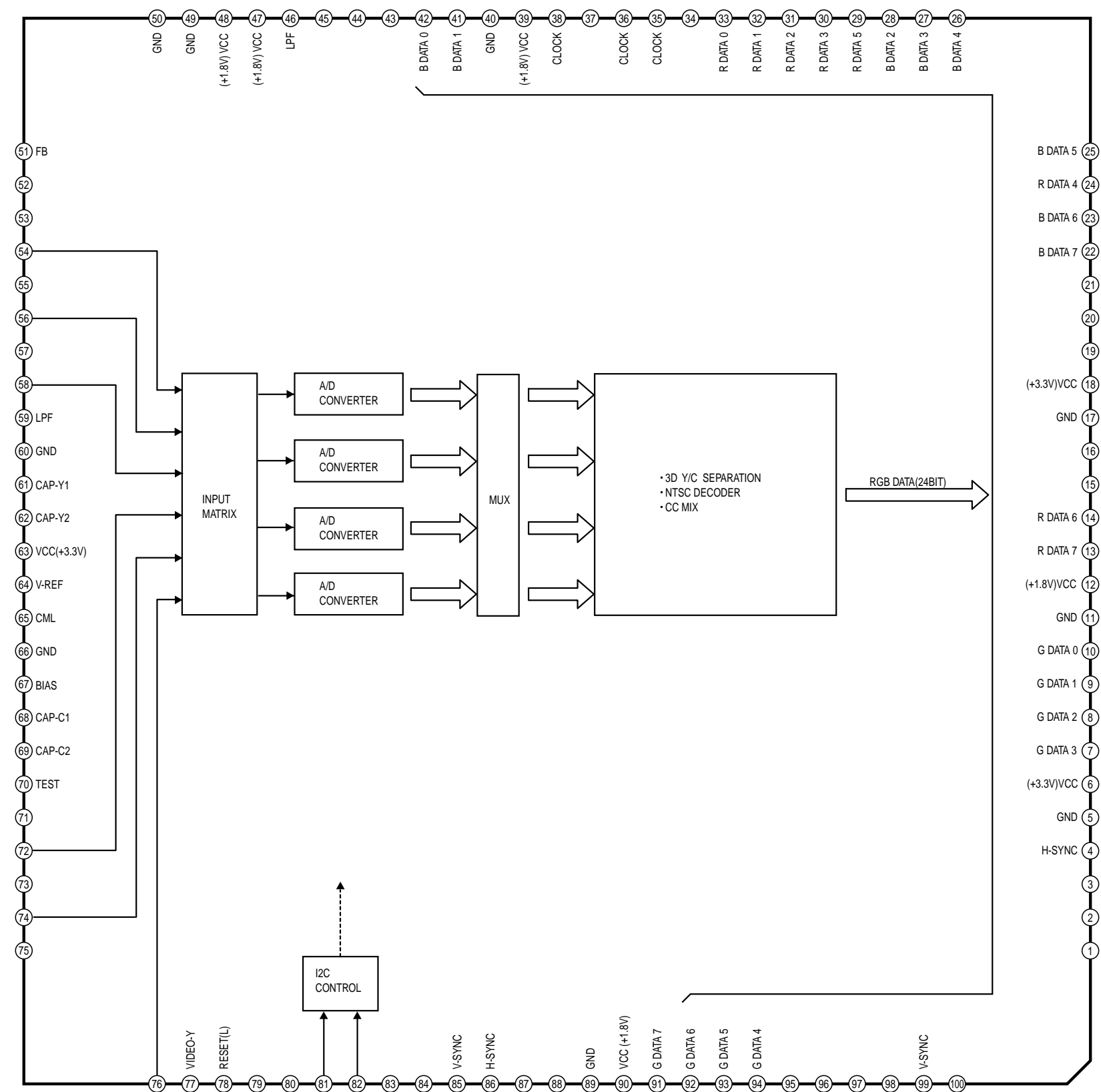
LAMP OPERATION TIME

CURRENT LAMP: 2000h
OSD DISPLAY : ON
LON COUNT : 153
BKSV: 4B 7E 3D CA FB ← BKSV number
```

CAUTION:
The BKS_V number will not be displayed correctly if no signal has been input. Therefore, be sure that you are reading the new number that was switched to with the input signal in power on condition. Be sure to record the BKS_V number in the BKS_V list after switching, and ignore the BKS_V number displayed before switching.

IC5801 DETAIL BLOCK DIAGRAM

IC5000 DETAIL BLOCK DIAGRAM



IC5000 DETAIL BLOCK DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

I/O CHART OF IC5001 (1/2)

Pin No.	I/O	Signal Name	Description	Pin No.	I/O	Signal Name	Description	Pin No.	I/O	Signal Name	Description	Pin No.	I/O	Signal Name	Description
A1	-	GND	GND	C14	I	YIC0	DT Y DATA 0	H3	O	CLK0A	CLOCK	P2	I	GYIA6	G DATA 6
A2	-	GND	GND	C15	I	YIC3	DT Y DATA 3	H4	-	TPOUT3	(Not used)	P3	I	GYIA5	G DATA 5
A3	I	OSDI14	OSD-R DATA 3	C16	I	YIC6	DT Y DATA 6	H23	O	G0E7	G DATA 5	P4	I	GYIA4	G DATA 4
A4	I	OSDI11	OSD-R DATA 0	C17	I	UVIC1	DT UV DATA 1	H24	O	G0E8	G DATA 6	P11	-	GND	GND
A5	I	OSDI8	OSD-G DATA 3	C18	I	UVIC4	DT UV DATA 4	H25	O	G0E9	G DATA 7	P12	-	GND	GND
A6	I	OSDI5	OSD-G DATA 0	C19	I	UVIC7	DT UV DATA 7	H26	-	G0E0	(Not used)	P13	-	GND	GND
A7	I	OSDI2	OSD-B DATA 2	C20	I	CLKIC	DT-CLOCK	J1	I	RVIA4	R DATA 4	P14	-	GND	GND
A8	I	OSDHSI	OSD H-SYNC	C21	I	TMS	TEST MODE SELECT	J2	I	RVIA3	R DATA 3	P15	-	GND	GND
A9	I	OSDYMI	OSD-YM	C22	-	GND	GND	J3	I	RVIA2	R DATA 2	P16	-	GND	GND
A10	I	VDDW	+3.3V	C23	-	GND	GND	J4	I	VDDW	+3.3V	P23	I	VDD	+1.2V
A11	-	IOUT	(Not used)	C24	-	GND	GND	J23	I	VDDW	+3.3V	P24	I	VDD	+1.2V
A12	I	VDDW	+3.3V	C25	I	VDDW	+3.3V	J24	I	VDDW	+3.3V	P25	-	ROE1	(Not used)
A13	O	MOSDVSC	OSD V-SYNC	C26	I	VDDW	+3.3V	J25	O	G0E5	G DATA 3	P26	O	ROE2	R DATA 0
A14	O	CLKOD	OSD-CLOCK	D1	O	TPOUT0	RESET	J26	O	G0E6	G DATA 4	R1	I	UVIB1	HDMI UV DATA 1
A15	I	YIC1	DT Y DATA 1	D2	O	CPOUT1	CHARGE PUMP	K1	I	BUIA5	B DATA 5	R2	I	UVIB0	HDMI UV DATA 0
A16	I	YIC4	DT Y DATA 4	D3	I	VDDP	+1.2V	K2	I	BUIA4	B DATA 4	R3	I	CLKIB2	HDMI CLOCK
A17	I	YIC7	DT Y DATA 7	D4	-	GND	GND	K3	I	BUIA3	B DATA 3	R4	I	ENBIB	HDMI ENABLE
A18	I	UVIC2	DT UV DATA 2	D5	-	GND	GND	K4	I	BUIA2	B DATA 2	R11	-	GND	GND
A19	I	UVIC5	DT UV DATA 5	D6	I	NRST	RESET(L)	K23	I	VDDW	+3.3V	R12	-	GND	GND
A20	I	VSIC	DT V-SYNC	D7	O	TPOUT4	HDMI WRITE PROTECT	K24	O	G0E2	G DATA 0	R13	-	GND	GND
A21	I	TRST	TEST RESET	D8	O	TPOUT5	IRIS LED ON(H)	K25	O	G0E3	G DATA 1	R14	-	GND	GND
A22	I	TCK	TEST CLOCK	D9	O	TPOUT6	LEE(L)	K26	O	G0E4	G DATA 2	R15	-	GND	GND
A23	I	SCL	I2C SERIAL CLOCK	D10	-	OSDVS1	(Not used)	L1	I	BUIA7	B DATA 7	R16	-	GND	GND
A24	I	EXCLKIN	FREERUN CLOCK	D11	-	ENBID	(Not used)	L2	I	BUIA6	B DATA 6	R23	-	ALPHAO1	(Not used)
A25	-	GND	GND	D12	-	FSADJ	(Not used)	L3	I	RVIA5	R DATA 5	R24	-	OSDYMO	(Not used)
A26	-	GND	GND	D13	I	VDD	+1.2V	L4	-	GND	GND	R25	-	OSDYSO	(Not used)
B1	-	GND	GND	D14	I	VDD	+1.2V	L11	-	GND	GND	R26	-	ROE0	(Not used)
B2	-	GND	GND	D15	I	VDDW	+3.3V	L12	-	GND	GND	T1	I	UVIB3	HDMI UV DATA 3
B3	I	OSDI15	OSD-R DATA 4	D16	I	VDDW	+3.3V	L13	-	GND	GND	T2	I	UVIB2	HDMI UV DATA 2
B4	I	OSDI12	OSD-R DATA 1	D17	I	VDDW	+3.3V	L14	-	GND	GND	T3	-	CLKIB1	(Not used)
B5	I	OSDI9	OSD-G DATA 4	D18	-	TEST	(Not used)	L15	-	GND	GND	T4	I	VDDW	+3.3V
B6	I	OSDI6	OSD-G DATA 1	D19	O	TDO	TEST DATA	L16	-	GND	GND	T11	-	GND	GND
B7	I	OSDI3	OSD-B DATA 3	D20	I	VDDW	+3.3V	L23	O	ROE8	R DATA 6	T12	-	GND	GND
B8	I	OSDI0	OSD-B DATA 0	D21	I	VDD	+1.2V	L24	O	ROE9	R DATA 7	T13	-	GND	GND
B9	I	OSDYSI	OSD-YS	D22	-	GND	GND	L25	-	G0E0	(Not used)	T14	-	GND	GND
B10	-	ALPHAIO	(Not used)	D23	-	GND	GND	L26	-	G0E1	(Not used)	T15	-	GND	GND
B11	-	PADAGND	GND	D24	-	GND	GND	M1	I	GYIA1	G DATA 1	T16	-	GND	GND
B12	I	PADDVDD	+3.3V	D25	O	HSOE	H-SYNC	M2	I	GYIA0	G DATA 0	T23	-	OSDHSO	(Not used)
B13	-	PADAGND	GND	D26	O	VSOE	V-SYNC	M3	I	RVIA7	R DATA 7	T24	-	CLKOF	(Not used)
B14	O	MOSDHSC	OSD H-SYNC	E1	I	VCOIN	VCO	M4	I	RVIA6	R DATA 6	T25	-	OSDO15	(Not used)
B15	I	YIC2	DT Y DATA 2	E2	-	TPOUT1	(Not used)	M11	-	GND	GND	T26	-	ALPHAO0	(Not used)
B16	I	YIC5	DT Y DATA 5	E3	-	GND	GND	M12	-	GND	GND	U1	I	UVIB7	HDMI UV DATA 7
B17	I	UVIC0	DT UV DATA 0	E4	-	GND	GND	M13	-	GND	GND	U2	I	UVIB6	HDMI UV DATA 6
B18	I	UVIC3	DT UV DATA 3	E23	-	GND	GND	M14	-	GND	GND	U3	I	UVIB5	HDMI UV DATA 5
B19	I	UVIC6	DT UV DATA 6	E24	O	BOE8	B DATA 6	M15	-	GND	GND	U4	I	UVIB4	HDMI UV DATA 4
B20	I	HSIC	DT H-SYNC	E25	O	BOE9	B DATA 7	M16	-	GND	GND	U23	I	VDDW	+3.3V
B21	I	TDI	TEST DATA	E26	O	CLKOE	CLOCK	M23	I	VDDW	+3.3V	U24	I	VDDW	+3.3V
B22	I/O	SDA	I2C SERIAL DATA	F1	-	FBO_PLL	(Not used)	M24	O	ROE5	R DATA 3	U25	-	OSDO13	(Not used)
B23	I	VSIB	HDMI V-SYNC	F2	-	REFO_PLL	(Not used)	M25	O	ROE6	R DATA 4	U26	-	OSDO14	(Not used)
B24	-	GND	GND	F3	-	TPOUT2	(Not used)	M26	O	ROE7	R DATA 5	V1	I	YIB1	HDMI Y DATA 1
B25	-	GND	GND	F4	I	VDD	+1.2V	N1	I	VSIA	V-SYNC	V2	I	YIB0	HDMI Y DATA 0
B26	I	VDDW	+3.3V	F23	I	VDD	+1.2V	N2	I	HSIA	H-SYNC	V3	I	UVIB9	HDMI UV DATA 9
C1	I	VCOINV1	VCO	F24	O	BOE5	B DATA 3	N3	I	GYIA3	G DATA 3	V4	I	UVIB8	HDMI UV DATA 8
C2	-	GNDP	GND	F25	O	BOE6	B DATA 4	N4	I	GYIA2	G DATA 2	V23	I	VDDW	+3.3V
C3	-	GND	GND	F26	O	BOE7	B DATA 5	N11	-	GND	GND	V24	-	OSDO10	(Not used)
C4	I	OSDI13	OSD-R DATA 2	G1	I	CLKIA	CLOCK	N12	-	GND	GND	V25	-	OSDO11	(Not used)
C5	I	OSDI10	OSD-G DATA 5	G2	I	BUIA1	B DATA 1	N13	-	GND	GND	V26	-	OSDO12	(Not used)
C6	I	OSDI7	OSD-G DATA 2	G3	I	BUIA0	B DATA 0	N14	-	GND	GND	W1	I	YIB5	HDMI Y DATA 5
C7	I	OSDI4	OSD-B DATA 4	G4	-	GND	GND	N15	-	GND	GND	W2	I	YIB4	HDMI Y DATA 4
C8	I	OSDI1	OSD-B DATA 1	G23	-	BOE1	(Not used)	N16	-	GND	GND	W3	I	YIB3	HDMI Y DATA 3
C9	I	CLKID	OSD-CLOCK	G24	O	BOE2	B DATA 0	N23	I	VDDW	+3.3V	W4	I	YIB2	HDMI Y DATA 2
C10	-	ALPHA11	(Not used)	G25	O	BOE3	B DATA 1	N24	I	VDDW	+3.3V	W23		OSDO6	
C11	I	PADAVDD	+3.3V	G26	O	BOE4	B DATA 2	N25	O	ROE3	R DATA 1	W24	-	OSDO7	(Not used)
C12	I	VREF	V-REF	H1	I	RVIA1	R DATA 1	N26	O	ROE4	R DATA 2	W25	-	OSDO8	(Not used)
C13	-	VG	(Not used)	H2	I	RVIA0	R DATA 0	P1	I	GYIA7	G DATA 7	W26	-	OSDO9	(Not used)

I/O CHART OF IC5001 (2/2)

Pin No.	I/O	Signal Name	Description
Y1	I	YIB9	HDMI Y DATA 9
Y2	I	YIB8	HDMI Y DATA 8
Y3	I	YIB7	HDMI Y DATA 7
Y4	I	YIB6	HDMI Y DATA 6
Y23	-	OSDO2	(Not used)
Y24	-	OSDO3	(Not used)
Y25	-	OSDO4	(Not used)
Y26	-	OSDO5	(Not used)
AA1	I	FRCLKIN	FR CLOCK
AA2	I	HSIB	HDMI H-SYNC
AA3	I	VDDP	+1.2V
AA4	I	VDD	+1.2V
AA23	I	VDD	+1.2V
AA24	-	CLKID2	(Not used)
AA25	-	OSDO0	(Not used)
AA26	-	OSDO1	(Not used)
AB1	-	LPF_PLL	(Not used)
AB2	I	VDD_DLL1	+1.2V
AB3	-	VSS_DLL1	GND
AB4	-	GND	GND
AB23	-	GND	GND
AB24	-	GND	GND
AB25	-	OSDVS12	(Not used)
AB26	-	OSDHS12	(Not used)
AC1	O	A9	SDRAM ADDRESS 9
AC2	O	A4	SDRAM ADDRESS 4
AC3	O	A11	SDRAM ADDRESS 11
AC4	-	GND	GND
AC5	-	GND	GND
AC6	I	VDD	+1.2V
AC7	I	VDD	+1.2V
AC8	I	VDD25	+2.5V
AC9	I	VDD25	+2.5V
AC10	I	VDD	+1.2V
AC11	I	VDD	+1.2V
AC12	I/O	DQ2	SDRAM DATA 2
AC13	I	VDD	+1.2V
AC14	I	VDD25	+2.5V
AC15	-	FBCK	(Not used)
AC16	I	VDD	+1.2V
AC17	I/O	DQ27	SDRAM DATA 27
AC18	I	VDD	+1.2V
AC19	I	VDD25	+2.5V
AC20	I	VDD	+1.2V
AC21	I	VDD	+1.2V
AC22	-	GND	GND
AC23	-	GND	GND
AC24	-	GND	GND
AC25	I	VDD_DLL0	+1.2V
AC26	-	VSS_DLL0	GND
AD1	O	A3	SDRAM ADDRESS 3
AD2	O	A10	SDRAM ADDRESS 10
AD3	-	GND	GND
AD4	I	VDD25	+2.5V
AD5	O	A2	SDRAM ADDRESS 2
AD6	O	BA0	BANK 0
AD7	I	VDD	+1.2V
AD8	I/O	DQ23	SDRAM DATA 23
AD9	I/O	DQ20	SDRAM DATA 20
AD10	I/O	DQ18	SDRAM DATA 18
AD11	I/O	DQ7	SDRAM DATA 7
AD12	I/O	DQ4	SDRAM DATA 4
AD13	I/O	DQ1	SDRAM DATA 1
AD14	I	VDD25	+2.5V
AD15	O	NSDCLKO	SDRAM CLOCK

Pin No.	I/O	Signal Name	Description
AD16	I/O	DQ29	SDRAM DATA 29
AD17	I/O	DQ24	SDRAM DATA 24
AD18	I/O	DQ13	SDRAM DATA 13
AD19	I	VDD25	+2.5V
AD20	I	VDD	+1.2V
AD21	I/O	DQ8	SDRAM DATA 8
AD22	O	A5	SDRAM ADDRESS 5
AD23	I	VDD25	+2.5V
AD24	-	GND	GND
AD25	I	VDDW	+3.3V
AD26	I	VDDW	+3.3V
AE1	I	VDDW	+3.3V
AE2	-	GND	GND
AE3	I	VDD25	+2.5V
AE4	I	VDD25	+2.5V
AE5	O	A0	SDRAM ADDRESS 0
AE6	O	RAS	ROAD ADDRESS STROBE
AE7	I	REFSSTL2	V-REF(+1.25V)
AE8	I/O	DQ22	SDRAM DATA 22
AE9	O	DQS2	SDRAM DATA STROBE 2
AE10	I/O	DQ17	SDRAM DATA 17
AE11	I/O	DQ6	SDRAM DATA 6
AE12	O	DQS0	SDRAM DATA STROBE 0
AE13	I	REFSSTL2	V-REF(+1.25V)
AE14	O	SDCLKO	SDRAM CLOCK
AE15	I/O	DQ30	SDRAM DATA 30
AE16	O	DQS3	SDRAM DATA STROBE 3
AE17	I/O	DQ25	SDRAM DATA 25
AE18	I/O	DQ14	SDRAM DATA 14
AE19	O	DQS1	SDRAM DATA STROBE 1
AE20	I/O	DQ10	SDRAM DATA 10
AE21	I	REFSSTL2	V-REF(+1.25V)
AE22	O	A7	SDRAM ADDRESS 7
AE23	I	VDD25	+2.5V
AE24	I	VDD25	+2.5V
AE25	-	GND	GND
AE26	I	VDDW	+3.3V
AF1	-	GND	GND
AF2	I	VDD25	+2.5V
AF3	I	VDD25	+2.5V
AF4	O	A1	SDRAM ADDRESS 1
AF5	O	BA1	BANK 1
AF6	O	WE	SDRAM WRITE ENABLE
AF7	O	CAS	COLUMN ADDRESS STROBE
AF8	I/O	DQ21	SDRAM DATA 21
AF9	I/O	DQ19	SDRAM DATA 19
AF10	I/O	DQ16	SDRAM DATA 16
AF11	I/O	DQ5	SDRAM DATA 5
AF12	I/O	DQ3	SDRAM DATA 3
AF13	I/O	DQ0	SDRAM DATA 0
AF14	O	SDCKE	SDRAM CKE
AF15	I/O	DQ31	SDRAM DATA 31
AF16	I/O	DQ28	SDRAM DATA 28
AF17	I/O	DQ26	SDRAM DATA 26
AF18	I/O	DQ15	SDRAM DATA 15
AF19	I/O	DQ12	SDRAM DATA 12
AF20	I/O	DQ11	SDRAM DATA 11
AF21	I/O	DQ9	SDRAM DATA 9
AF22	O	A8	SDRAM ADDRESS 8
AF23	O	A6	SDRAM ADDRESS 6
AF24	I	VDD25	+2.5V
AF25	I	VDD25	+2.5V
AF26	-	GND	GND

MAIN V SCHEMATIC DIAGRAM

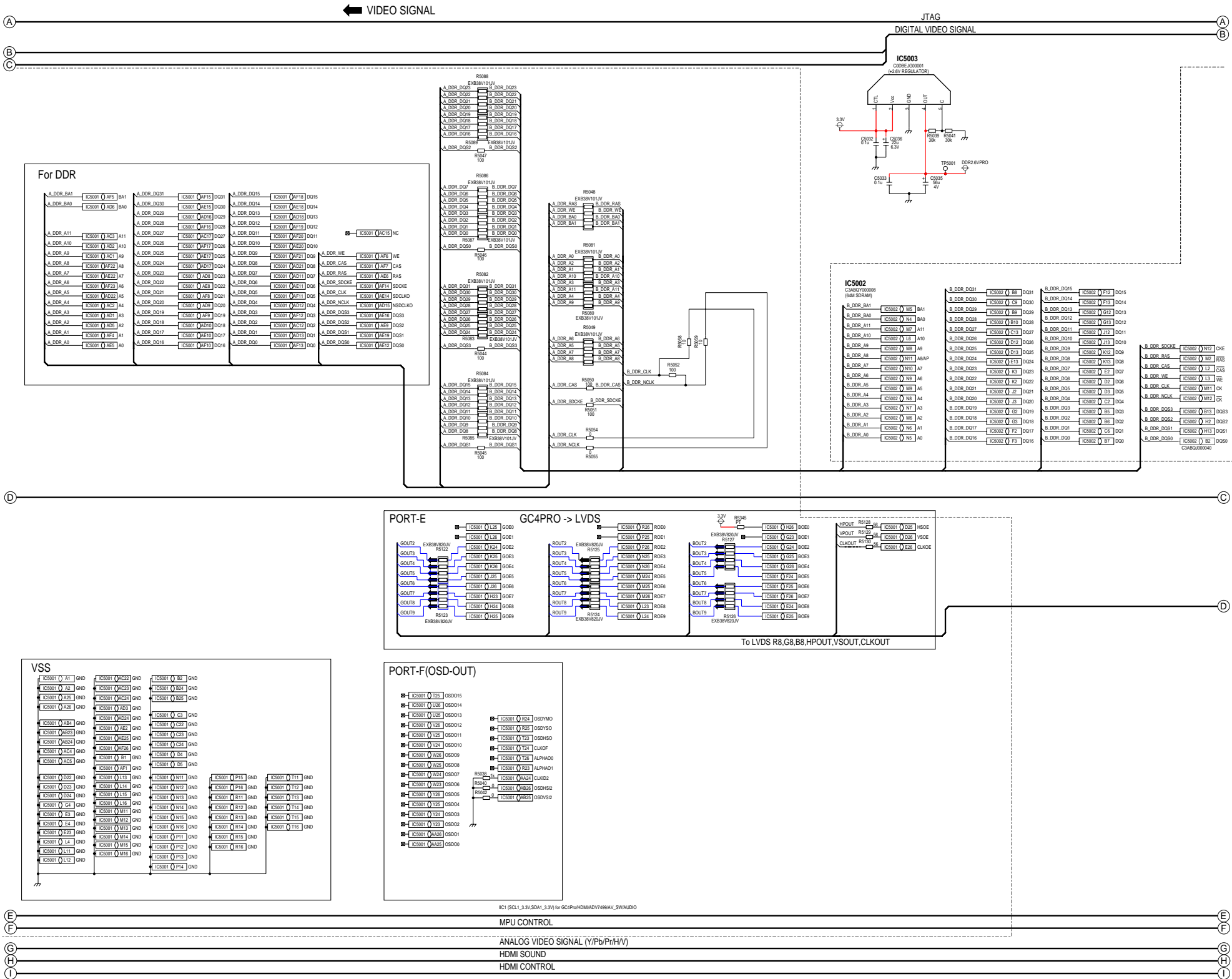
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: PARTS MARKED "PT" ARE NOT USED.

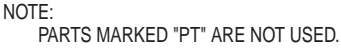
COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
Not Used	PT



LINK TO VOLTAGE CHART

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
Not Used	PT



LINK TO VOLTAGE CHART

I/O CHART OF IC6001

Pin No.	I/O	Port No.	Signal Name	Description
1	-	-	TSTMD1	(Not used)
2	I	P83	KEYSCAN2	KEY DATA 2
3	O	P66	A07	ADDRESS 7
4	O	P65	A06	ADDRESS 6
5	O	P64	A05	ADDRESS 5
6	O	P63	A04	ADDRESS 4
7	O	P62	A03	ADDRESS 3
8	O	P61	A02	ADDRESS 2
9	O	P60	A01	ADDRESS 1
10	-	-	TEST	(Not used)
11	I	-	VDD	VDD (+3.3V)
12	I	-	RTCXI	32.768kHz OSCILLATION
13	O	-	RTCXO	32.768kHz OSCILLATION
14	-	-	VSS	GND
15	O	P45	CEC_OUT	CEC
16	O	P44	HDMI_HW_RST	HDMI RESET(L)
17	O	P43	MAIN_SW	D/A SW(DIGITAL(L)/ANALOG(H))
18	O	P42	LAMP_ON	LAMP ON / OFF CONTROL (ON (H) / OFF (L))
19	O	P16	TIMER_ON_H	LAMP ON (H) / OFF (L)
20	O	P15	M_RESET	RESET(L)
21	O	P14	TEMP_LED	TEMP LED ON(H)
22	O	P13	LAMP_LED	LAMP LED ON(H)
23	I/O	PC3	SDA0B	I ² C SERVICE DATA
24	O	PC2	SCL0B	I ² C SERIAL CLOCK
25	-	-	VSS	GND
26	O	P41	AC_SW	AC POWER ON(H)
27	O	P40	LAMP_DET	LAMP STATUS(ON(H)/OFF(L))
28	I	-	VDD	VDD (+3.3V)
29	O	P37	BO4	OSD-B DATA 4
30	O	P36	BO3	OSD-B DATA 3
31	O	P35	BO2	OSD-B DATA 2
32	O	P34	BO1	OSD-B DATA 1
33	O	P33	BO0	OSD-B DATA 0
34	O	P32	GO5	OSD-G DATA 5
35	O	P31	GO4	OSD-G DATA 4
36	O	P30	GO3	OSD-G DATA 3
37	O	P27	GO2	OSD-G DATA 2
38	O	P26	GO1	OSD-G DATA 1
39	O	P25	GO0	OSD-G DATA 0
40	I	-	VDD	VDD (+3.3V)
41	-	-	VSS	GND
42	O	P24	RO4	OSD-R DATA 4
43	O	P23	RO3	OSD-R DATA 3
44	O	P22	RO2	OSD-R DATA 2
45	O	P21	RO1	OSD-R DATA 1
46	O	P20	RO0	OSD-R DATA 0
47	I	-	VDD	VDD (+3.3V)
48	I	-	OSDXI	OSD CLOCK
49	-	-	OSDXO	(Not used)
50	-	-	VSS	GND
51	I	P12	VSYN	OSD V-SYNC
52	O	P11	YS	OSD-YS
53	O	P10	YM	OSD-YM
54	I	P07	HSYN	OSD H-SYNC
55	I/O	PC1	SDA0A	I ² C SERIAL DATA 3
56	O	PC0	SCLA0	I ² C SERIAL CLOCK
57	O	P06	OSD_CLK1	OSD-CLOCK
58	-	P05	EMP_2	(Not used)
59	-	P04	EMP_3	(Not used)
60	O	P03	EED_WP	EEPROM WRITE PROTECT

Pin No.	I/O	Port No.	Signal Name	Description
61	I	P02	FAN_SOS	FAN LOCK DETECT
62	O	P01	OSD_HSI	OSD H_SYNC
63	-	P00	HW_ID1	(Not used)
64	-	-	AVSS	GND
65	I	-	AVDD2	VDD (+3.3V)
66	O	-	VOUENV	BUS SW ON(H) / OFF(L)
67	O	-	SD_BOOT	SD BOOT(H)
68	O	-	FAN_CONDCDC	FAN SPEED CONTROL
69	O	-	HDMI_A_PD_L	HDMI AUDIO (IC5800) POWER DOWN (L)
70	-	-	COMP	(Not used)
71	-	-	VREF	V-REF FOR IC6001
72	-	-	IREF	I-REF FOR IC6001
73	-	-	AVSS	GND
74	-	-	CVBS1	(Not used)
75	-	-	VREFHS1	(Not used)
76	-	-	CLL	(Not used)
77	I	-	AVDD1	VDD (+3.3V)
78	I	-	CVBS0	COMPOSITE VIDEO
79	-	-	VREFHS0	(Not used)
80	-	-	CLH	(Not used)
81	-	-	PLLTST	(Not used)
82	I	-	AVDD1	VDD (+3.3V)
83	-	-	AVSS	GND
84	O	PC7	SCL2	I ² C SERIAL CLOCK 0
85	I/O	PC6	SDA2	I ² C SERIAL DATA 0
86	I	PF3	HDMI_INT	HDMI INTERRUPT REQUEST
87	I	PF2	DT_FMT	STANDBY TRIGGER
88	I	PF1	CEC_INT	CEC INTERRUPT REQUEST
89	I	PF0	AC_STOP	AC STOP(L)
90	-	PE7	EMP_1	(Not used)
91	-	PE6	AFC1	(Not used)
92	I	PE5	COVER_OPEN_H	LAMP COVER OPEN(H) / CLOSE(L)
93	I	PE4	SOS2	OVER VOLTAGE / OVER CURRENT DETECT(H)
94	-	PE3	DT_PW_OFF	(Not used)
95	O	PE2	LO_B_SW	LOW+B ON(H)
96	I	PE1	KEYSCAN 0	KEY DATA 0
97	I	PE0	KEYSCAN 1	KEY DATA 1
98	-	-	VSS	GND
99	O	-	OSC2	4MHz OSCILLATION
100	I	-	OSC1	4MHz OSCILLATION
101	I	-	VDD	VDD (+3.3V)
102	I	P57	RM_IN	IR DATA
103	O	P95	PKS_SBO	ATSC SERIAL DATA 0
104	I	P94	PKS_SBI	ATSC SERIAL DATA 1
105	I	P93	DT_SRQ	DTV SERVICE REQUEST
106	O	P92	HDMI_MUTE	HDMI AUDIO MUTE(H)
107	I	P91	HDMI_HPD	HDMI HOT PLUG DETECT
108	I	P90	DT_5V_SENSE	+5V LINE DETECT
109	O	P56	PKS_RST	DTV RESET(L)
110	-	P55	HW_ID2	(Not used)
111	I	P54	SRQ	SERVICE REQUEST
112	O	P53	BA_CSO	IC6003 CS (L)
113	O	PD2	LINE_MUTE_H	LINE AUDIO MUTE(H)
114	O	PD1	PWR_LED_R	POWER LED(RED) ON(L)
115	O	PD0	PWR_LED_G	POWER LED(GREEN) ON(L)
116	O	PC5	SCL1	I ² C SERIAL CLOCK 1
117	I/O	PC4	SDA1	I ² C SERIAL DATA 1
118	-	-	CPUMD2	(Not used)
119	-	-	CPUMD1	(Not used)
120	-	-	CPUMD0	(Not used)

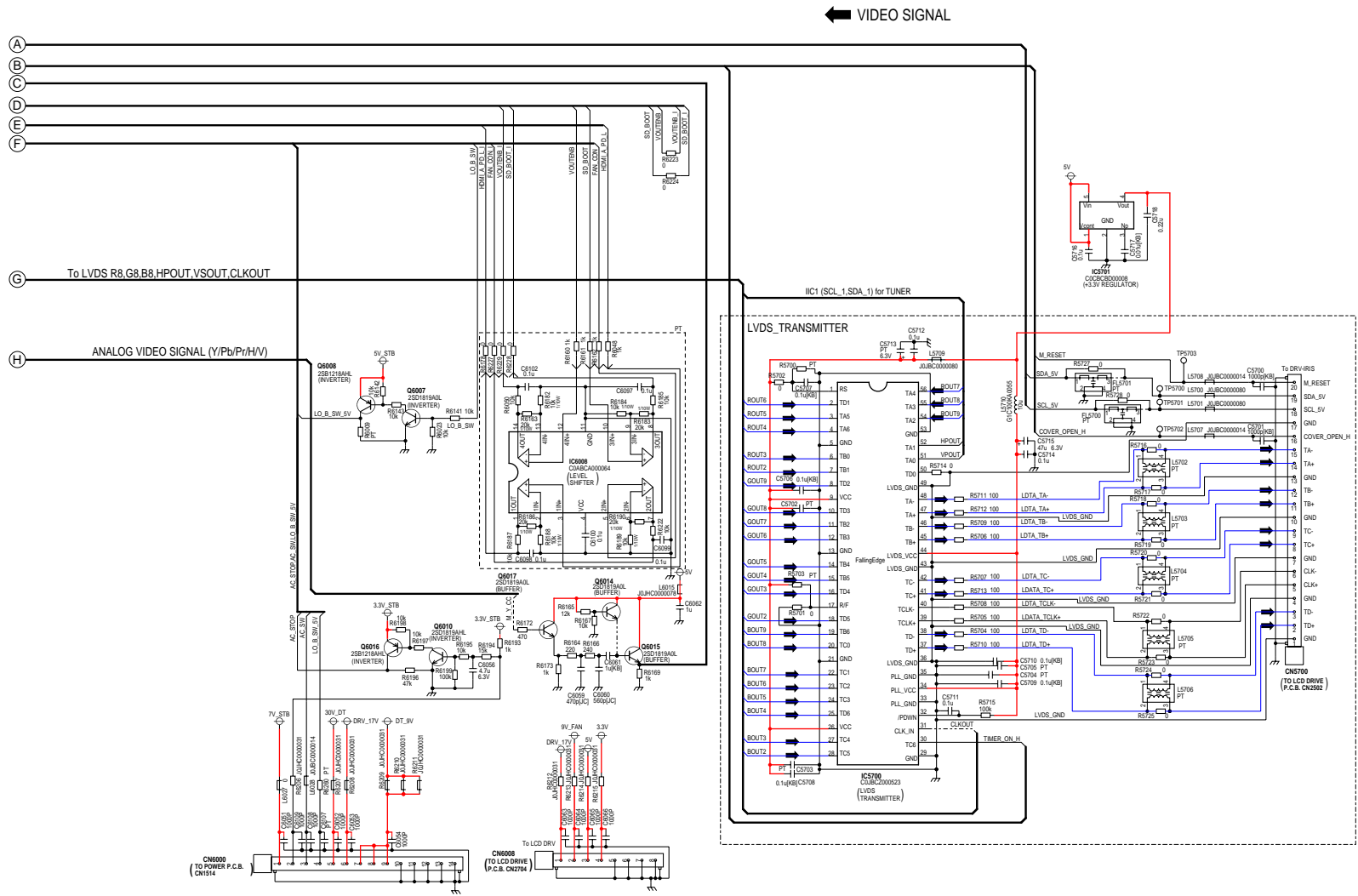
Pin No.	I/O	Port No.	Signal Name	Description
121	-	-	TSTMD0	(Not used)
122	O	P52	WE	IC6003 WRITE ENABLE (L)
123	O	P51	OE	IC6003 OUTPUT ENABLE (L)
124	I	-	VDD	VDD (+3.3V)
125	I	P50	/RST	RESET (L)
126	-	-	VSS	GND
127	I/O	PB7	D15	DATA 15
128	I/O	PB6	D14	DATA 14
129	I/O	PB5	D13	DATA 13
130	I/O	PB4	D12	DATA 12
131	I/O	PB3	D11	DATA 11
132	I/O	PB2	D10	DATA 10
133	I/O	PB1	D09	DATA 9
134	I/O	PB0	D08	DATA 8
135	I/O	PA7	D07	DATA 7
136	I/O	PA6	D06	DATA 6
137	I/O	PA5	D05	DATA 5
138	I/O	PA4	D04	DATA 4
139	-	-	VSS	GND
140	I	-	VDD	VDD (+3.3V)
141	I/O	PA3	D03	DATA 3
142	I/O	PA2	D02	DATA 2
143	I/O	PA1	D01	DATA 1
144	I/O	PA0	D00	DATA 0
145	-	P82	A19	(Not used)
146	O	P81	A18	ADDRESS 18
147	O	P80	A17	ADDRESS 17
148	O	P77	A16	ADDRESS 16
149	O	P76	A15	ADDRESS 15
150	O	P75	A14	ADDRESS 14
151	O	P74	A13	ADDRESS 13
152	O	P73	A12	ADDRESS 12
153	I	-	VDD	VDD (+3.3V)
154	-	-	VSS	GND
155	O	P72	A11	ADDRESS 11
156	O	P71	A10	ADDRESS 10
157	O	P70	A09	ADDRESS 9
158	O	P67	A08	ADDRESS 8
159	O	P84	A21	RESET(L)
160	-	-	OSCMD0	(Not used)

MAIN VIII SCHEMATIC DIAGRAM

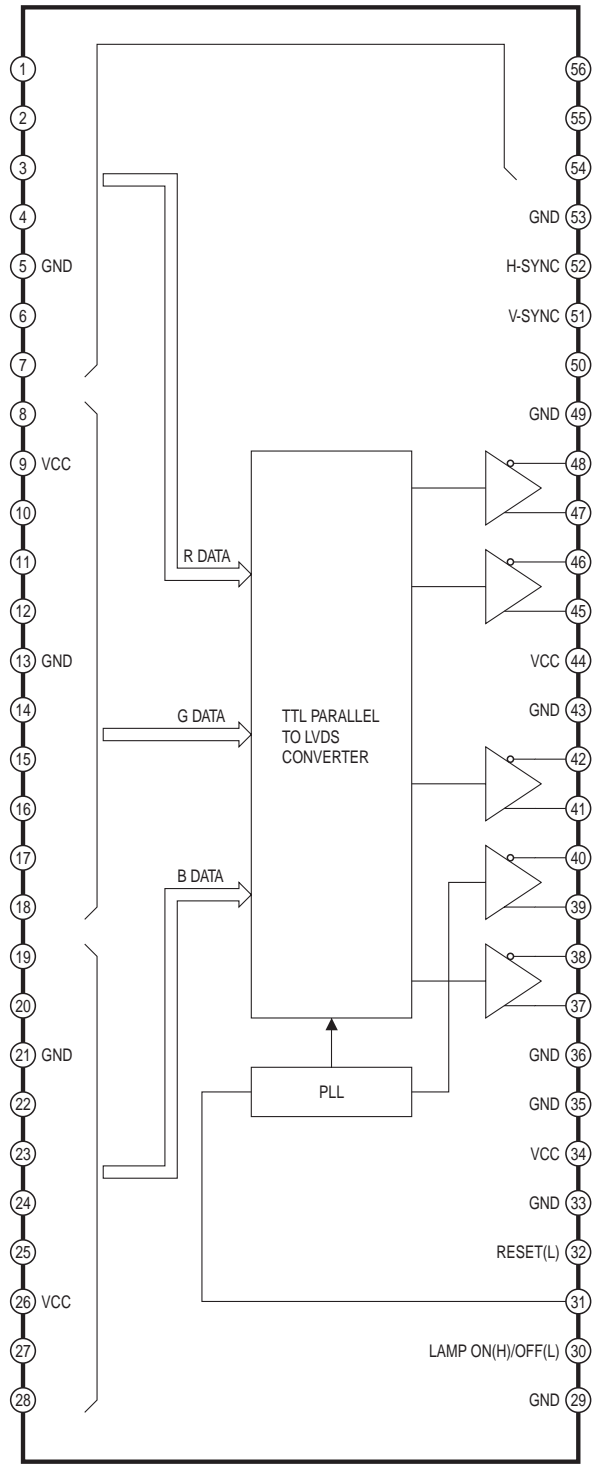
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: PARTS MARKED "PT" ARE NOT USED.



IC5700 DETAIL BLOCK DIAGRAM



COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
Not Used	PT

LINK TO VOLTAGE CHART

LSJB3211

MAIN VIII SCHEMATIC DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

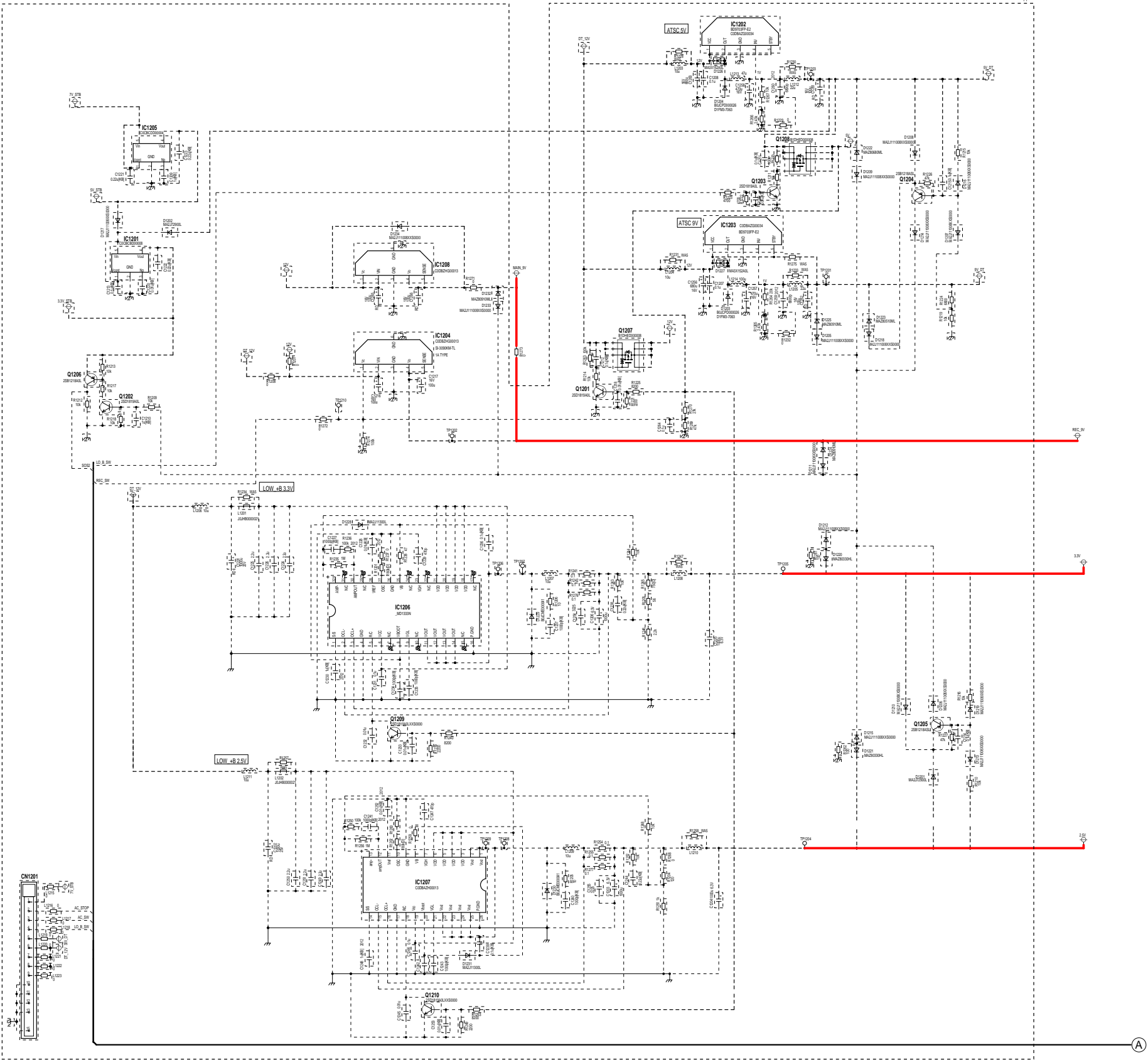
13.4. BASE SCHEMATIC DIAGRAMS

BASE I SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: PARTS MARKED "PT" ARE NOT USED.



COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
----	A
----	B
----	C
----	D
----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
Not Used	PT

LINK TO VOLTAGE CHART

LSJB3197

BASE I SCHEMATIC DIAGRAM

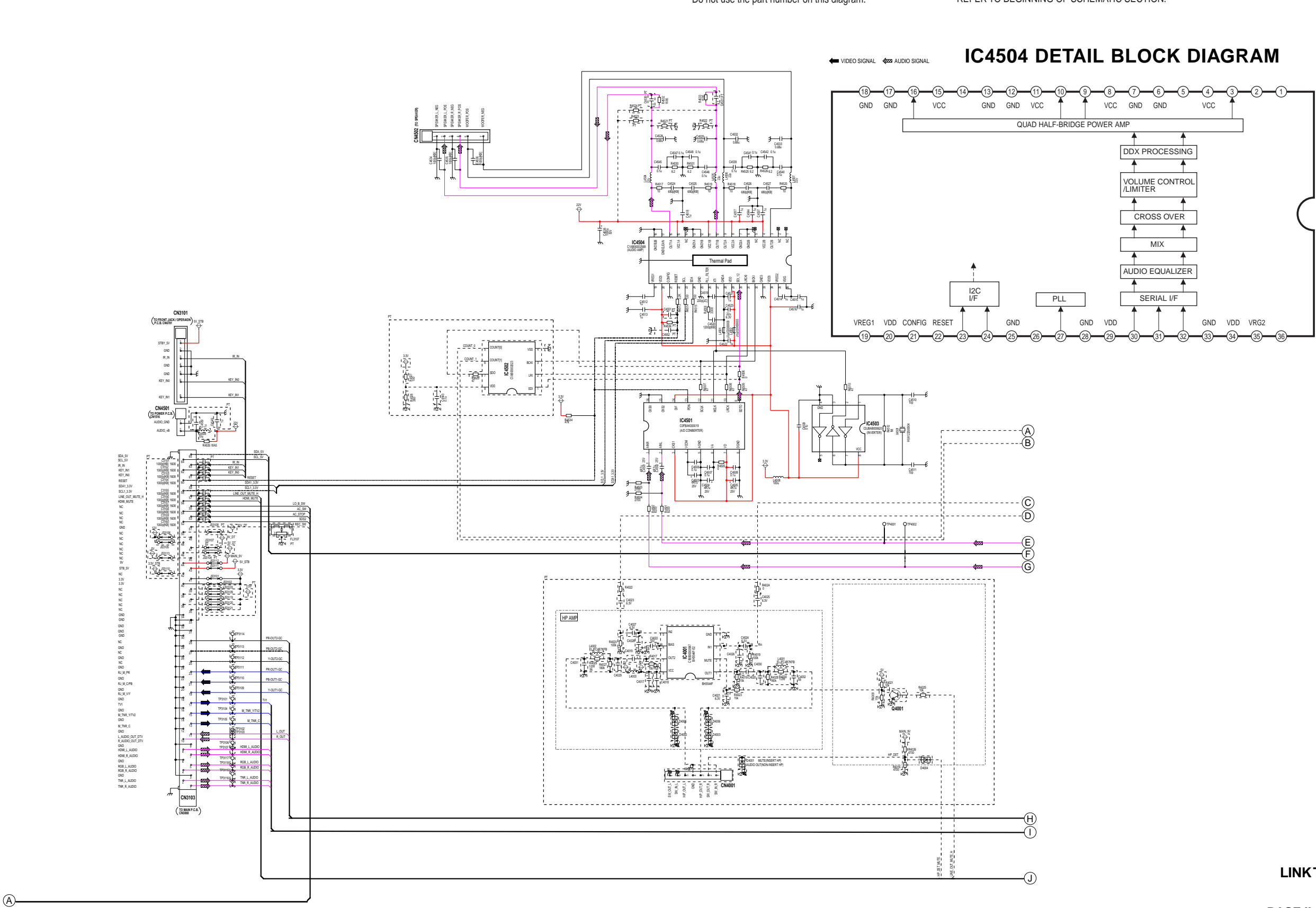
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BASE II SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: PARTS MARKED "PT" ARE NOT USED.



LINK TO VOLTAGE CHART

LSJB3197

BASE II SCHEMATIC DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

BASE III SCHEMATIC DIAGRAM

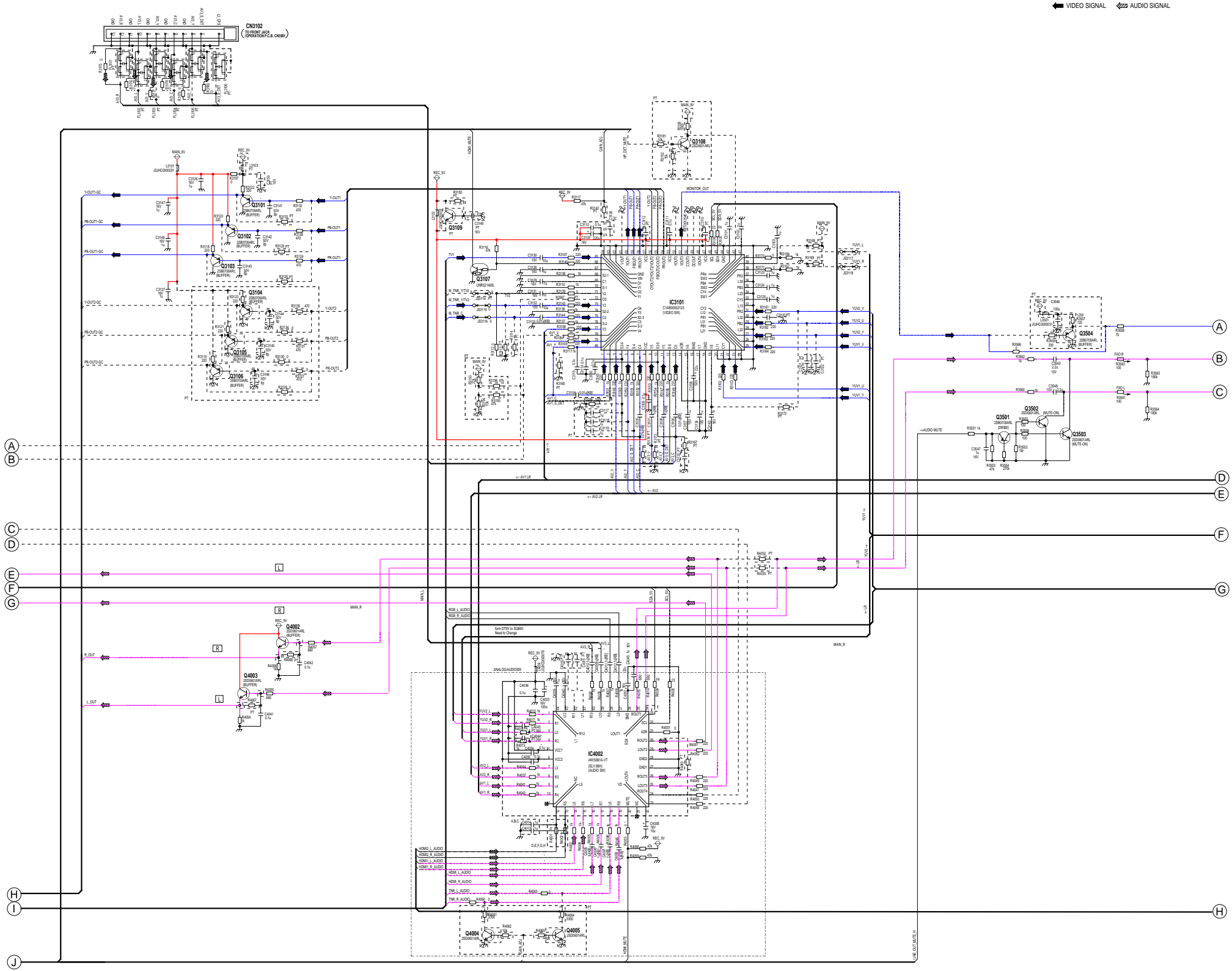
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: PARTS MARKED "PT" ARE NOT USED.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
Not Used	PT



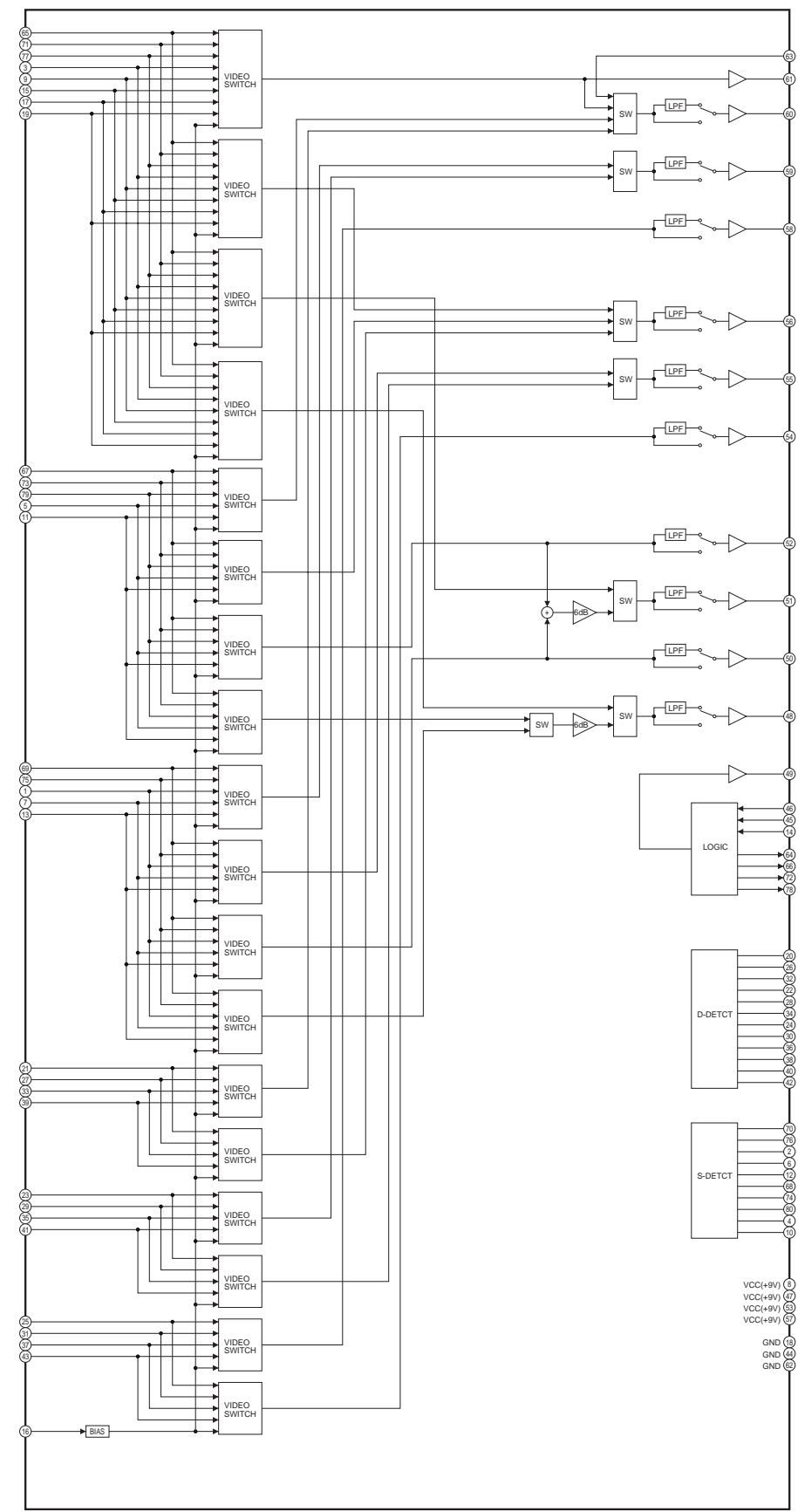
LINK TO VOLTAGE CHART

LSJB3197

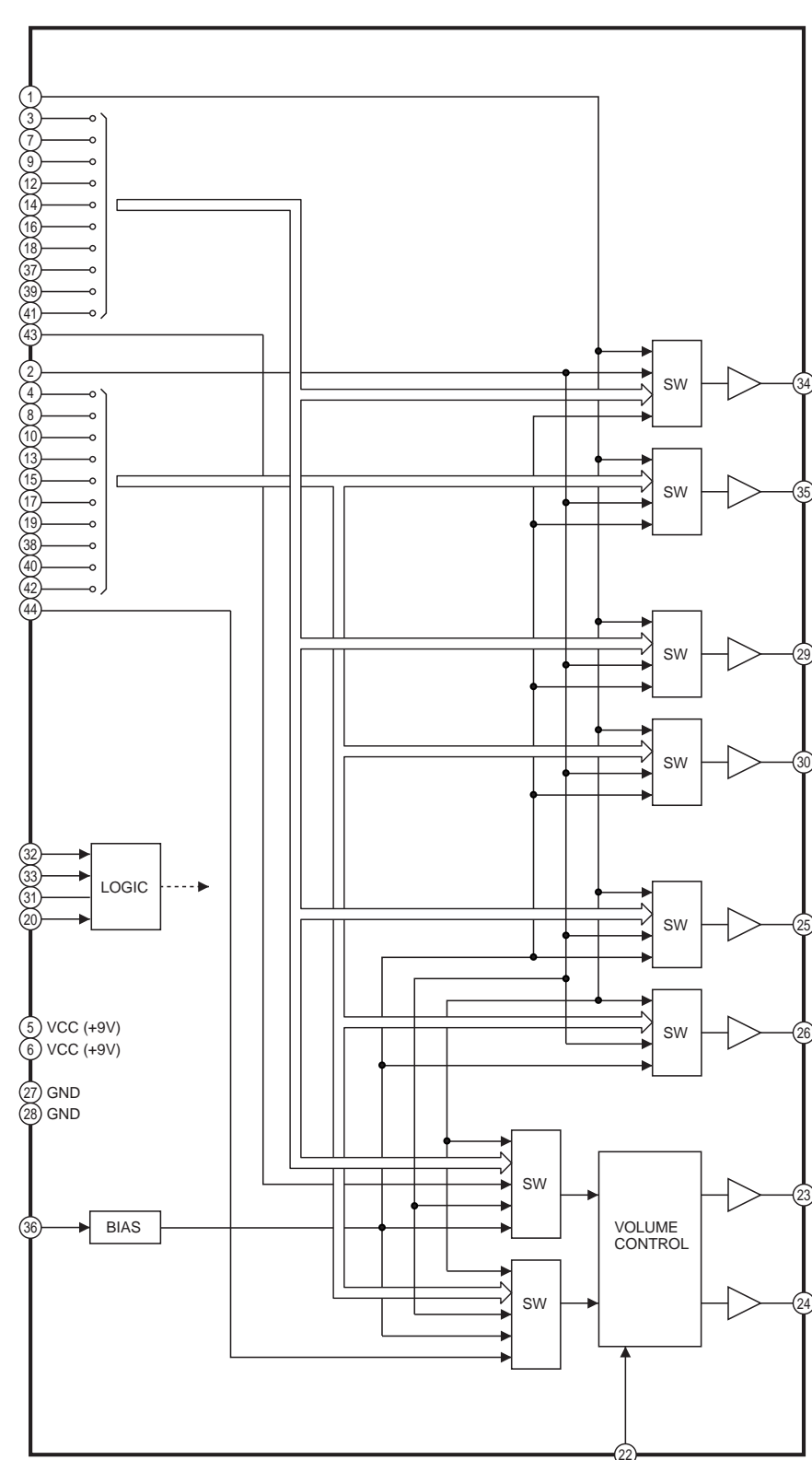
BASE III SCHEMATIC DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

IC3101 DETAIL BLOCK DIAGRAM



IC4002 DETAIL BLOCK DIAGRAM



IC3101 DETAIL BLOCK DIAGRAM
IC4002 DETAIL BLOCK DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

BASE IV SCHEMATIC DIAGRAM

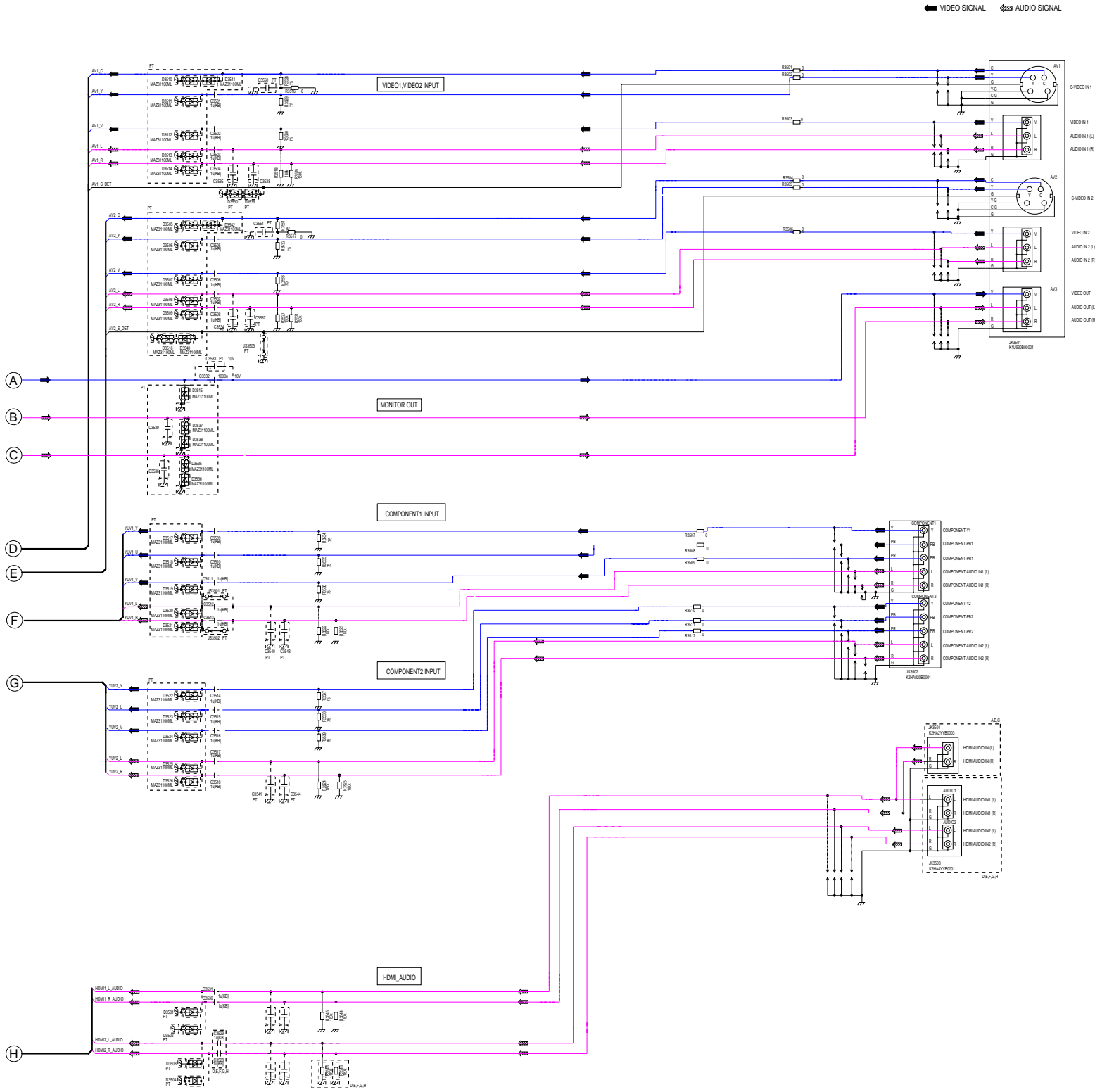
NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: PARTS MARKED "PT" ARE NOT USED.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H
Not Used	PT




LINK TO VOLTAGE CHART

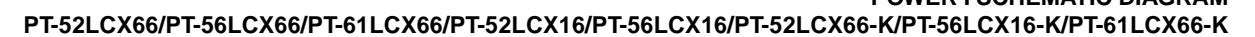
LSJB3197

BASE IV SCHEMATIC DIAGRAM

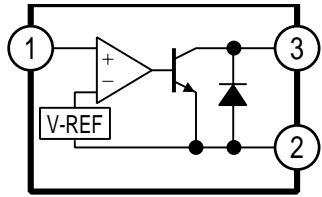
PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

NOTE:
PARTS MARKED "PT" ARE NOT USED.

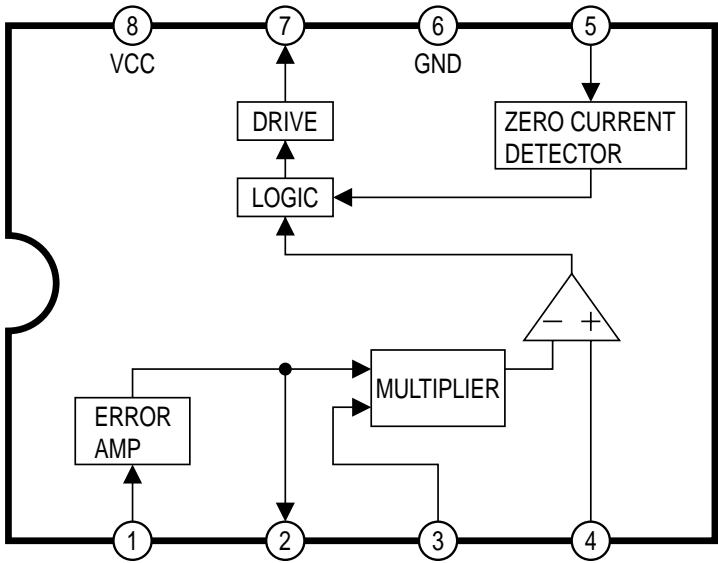
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.



IC1002 / IC1003 / IC1932 DETAIL BLOCK DIAGRAM



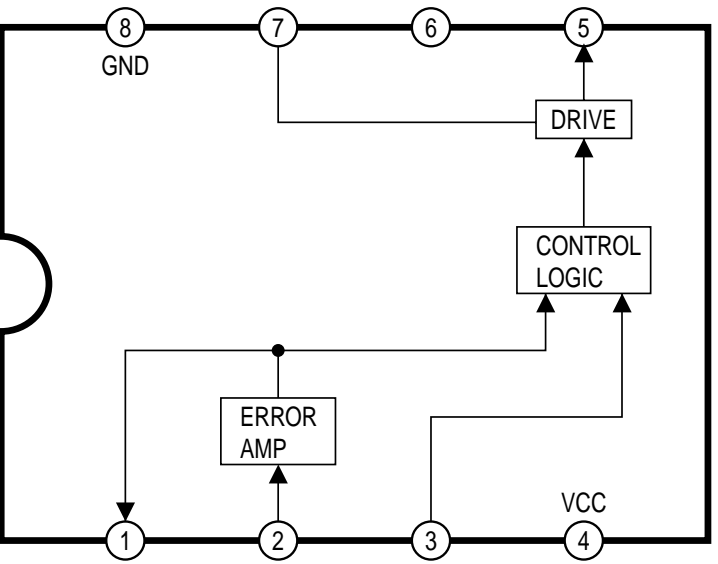
IC1831 DETAIL BLOCK DIAGRAM



I/O CHART OF POWER CONTROL 1 P.C.B. (P2 ON POWER P.C.B.)

Pin No.	I/O	Signal Name	Description	WF No.
1	I	REG9V	+9V FOR POWER CONTROL CIRCUIT 1	—
2	I	MAIN POWER CONT ON H	POWER CONTROL CIRCUIT 1 ON (H)	—
3	-	GND	GND	—
4	O	SW_12V	+12V	—
5	-	GND	GND	—
6	I	STABY12V	STBY+12V FOR POWER CONTROL CIRCUIT 1	—
7	O	OUT-A	PWM CONTROL 1	WF1
8	O	OUT-B	PWM CONTROL 2	WF2
9	I	PRI OVER CURRENT PROTECT 2	OVER CURRENT DETECT 2 FOR PRIMARY CIRCUIT	—
10	I	LATCH H/ON M/OFF L	POWER CONTROL CIRCUIT 1 OFF(L)/ON(M)/OVER VOLTAGE DETECT(H)	—
11	I	SEC OVER CURRENT PROTECT	OVER CURRENT DETECT FOR SECONDARY CIRCUIT	—
12	I	PRI OVER CURRENT PROTECT 1	OVER CURRENT DETECT 1 FOR PRIMARY CIRCUIT	—
13	-	SW FREQUENCY ADJ	+9V CONTROL	—


IC1931 DETAIL BLOCK DIAGRAM



IC1002 / IC1003 / IC1932 DETAIL BLOCK DIAGRAM
I/O CHART OF POWER CONTROL 1 P.C.B. (P2 ON POWER P.C.B.)
IC1831 DETAIL BLOCK DIAGRAM
IC1931 DETAIL BLOCK DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

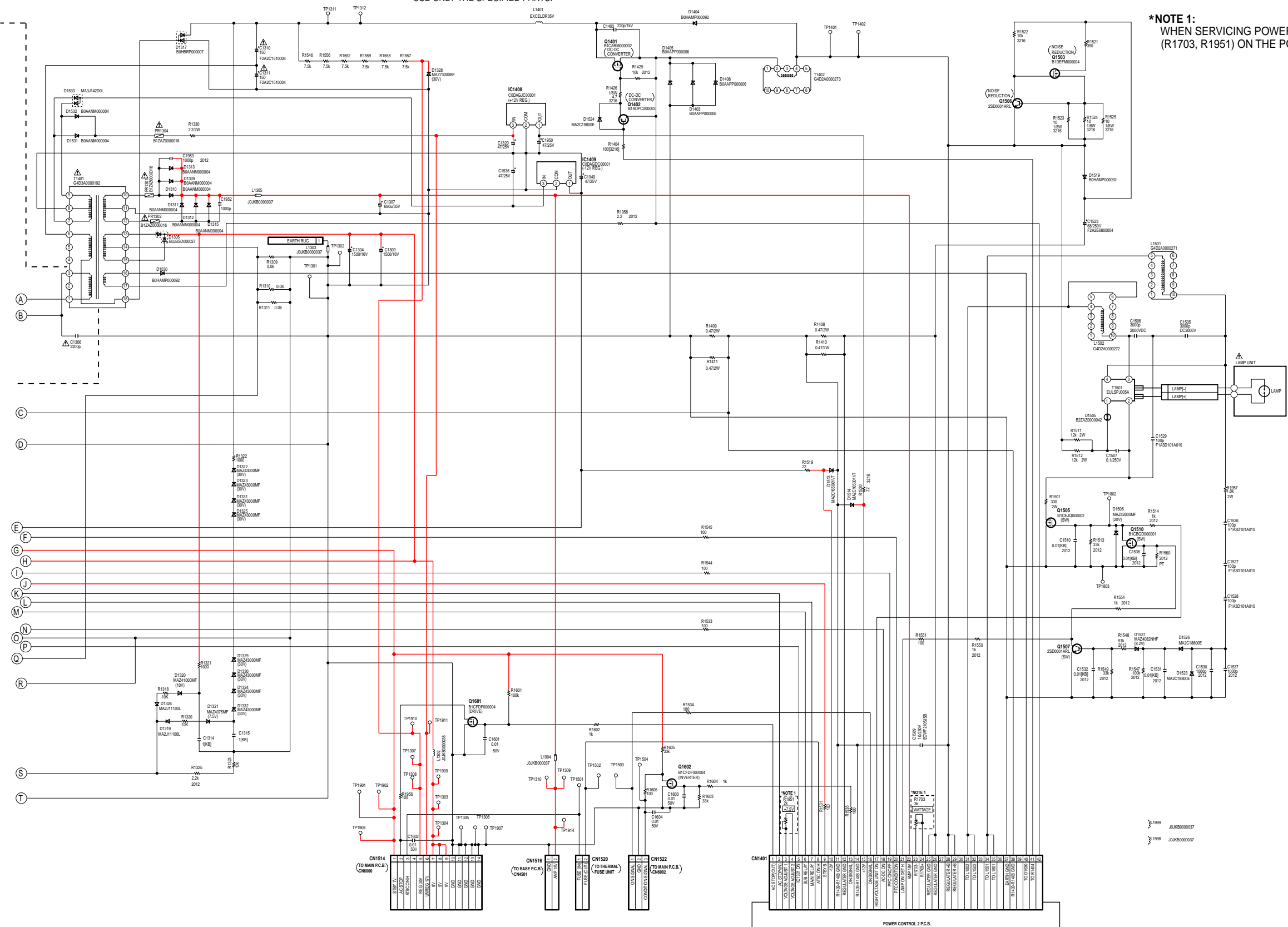
POWER II SCHEMATIC DIAGRAM

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: PARTS MARKED "PT" ARE NOT USED.



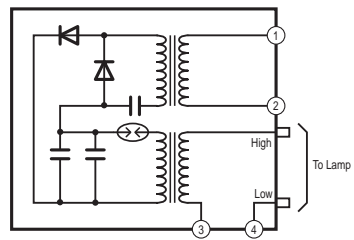
[LINK TO VOLTAGE CHART](#)

LSJB1206

POWER II SCHEMATIC DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

T1501 DETAIL BLOCK DIAGRAM



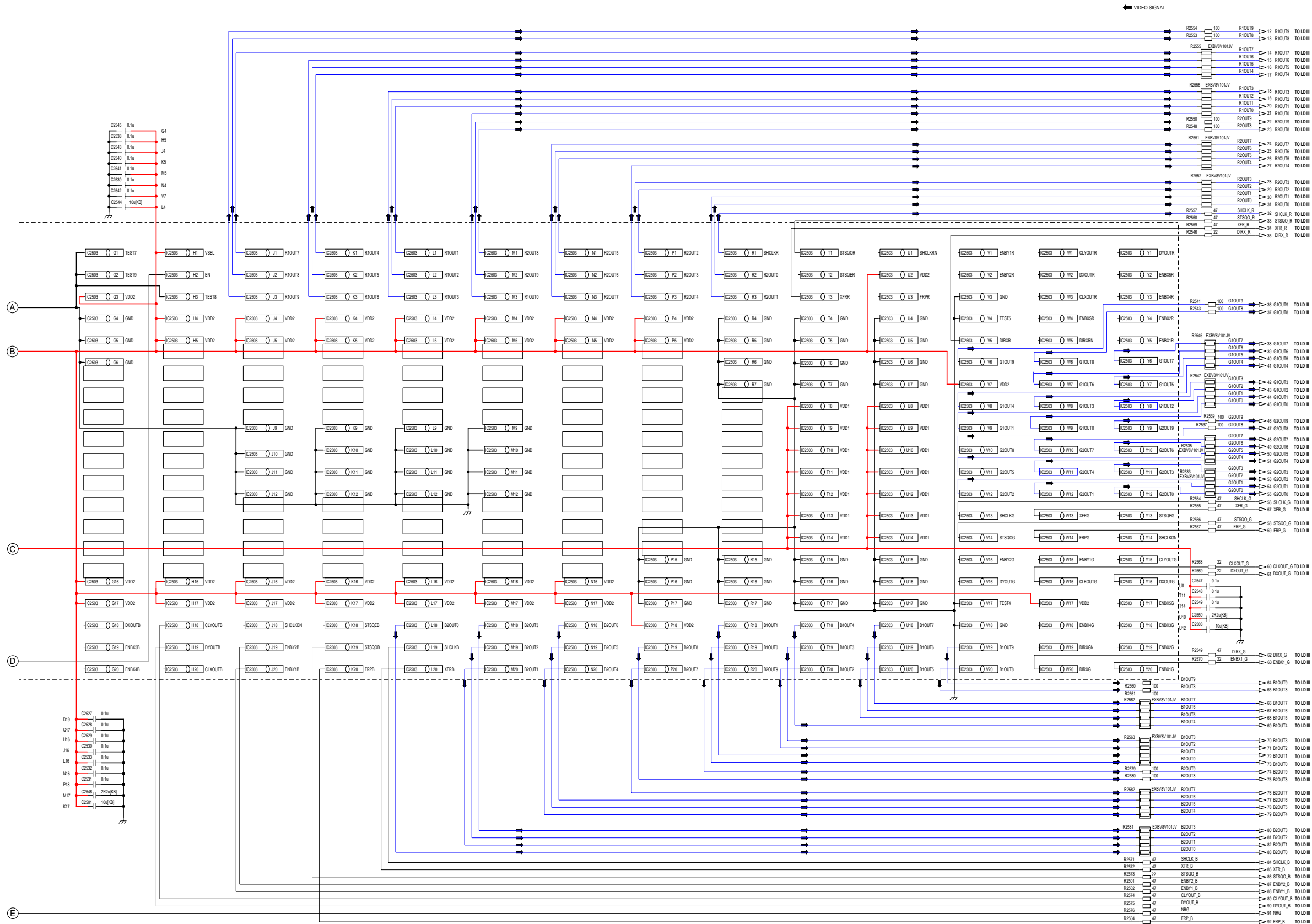
I/O CHART OF POWER CONTROL 2 P.C.B. (CN1401 ON POWER P.C.B.)

Pin No.	I/O	Signal Name	Description	WF No.
1	O	AC STOP(OUT)	AC STOP (L)	—
2	I	AC STOP(IN)	AC STOP DETECT (H)	—
3	-	VOLTAGE ADJUST 1	+7.5V CONTROL 1	—
4	-	VOLTAGE ADJUST 2	+7.5V CONTROL 2	—
5	O	IC1301 ON	POWER CONTROL CIRCUIT 1 ON (H)	—
6	O	SUB RELAY	SUB RELAY (RL1902) ON (H)	—
7	O	MAIN RELAY	MAIN RELAY (RL1903) ON (H)	—
8	I	ATSC ON H	AC SW (POWER SW) ON (H)	—
9	I	STBY B	STBY+12V FOR POWER CONTROL CIRCUIT 2	—
10	I	-12V	-12V FOR POWER CONTROL CIRCUIT 2	—
11	-	R1409-R1408 GND	GND	—
12	-	REGULATOR GND	GND	—
13	O	ON SIGNAL	LAMP STATUS (OFF (L)/ON (H))	—
14	-	R1409-R1408 GND	GND	—
15	I	+12V	+12V	—
16	I	ON SIGNAL	LAMP ON (H)	—
17	O	HIGH VOLTAGE UNIT ON	IGNITER ON (H)	—
18	O	AC-DC ON	POWER CONTROL CIRCUIT 1 ON (H)	—
19	O	PFC ON/OFF	PFC CIRCUIT ON (H)	—
20	I	PFC CONDITION	OVER VOLTAGE DETECT (L) FOR PFC CIRCUIT	—
21	I	LAMP ON DET H	LAMP ON DETECT (H)	—
22	I	AMP 18V	AMP+18V FOR POWER CONTROL CIRCUIT 2	—
23	-	R1703-	WATTAGE CONTROL	—
24	-	R1703+	WATTAGE CONTROL	—
25	-	REGULATOR GND	GND	—
26	-	REGULATOR GND	GND	—
27	-	-----	(Not used)	—
28	I	REGULATOR +B	+B (APPROX. +200V) FOR BALLAST CIRCUIT	—
29	I	REGULATOR +B	+B (APPROX. +200V) FOR BALLAST CIRCUIT	—
30	-	-----	(Not used)	—
31	O	TO L1502	INVERTER PULSE 1	WF6
32	O	TO L1502	INVERTER PULSE 1	—
33	-	-----	(Not used)	—
34	O	TO L1501	INVERTER PULSE 2	WF7
35	O	TO L1501	INVERTER PULSE 2	—
36	-	-----	(Not used)	—
37	-	EARTH GND	GND	—
38	-	R1409-R1408 GND	GND	—
39	-	-----	(Not used)	—
40	I	TO D1530	VB FOR PWM CONTROL OF POWER CONTROL CIRCUIT 2	—
41	O	TO R1404	PWM CONTROL FOR LAMP POWER	WF8
42	I		VS FOR PWM CONTROL OF POWER CONTROL CIRCUIT 2	—

NOTE:
PARTS MARKED "PT" ARE NOT USED.



NOTE:
PARTS MARKED "PT" ARE NOT USED.



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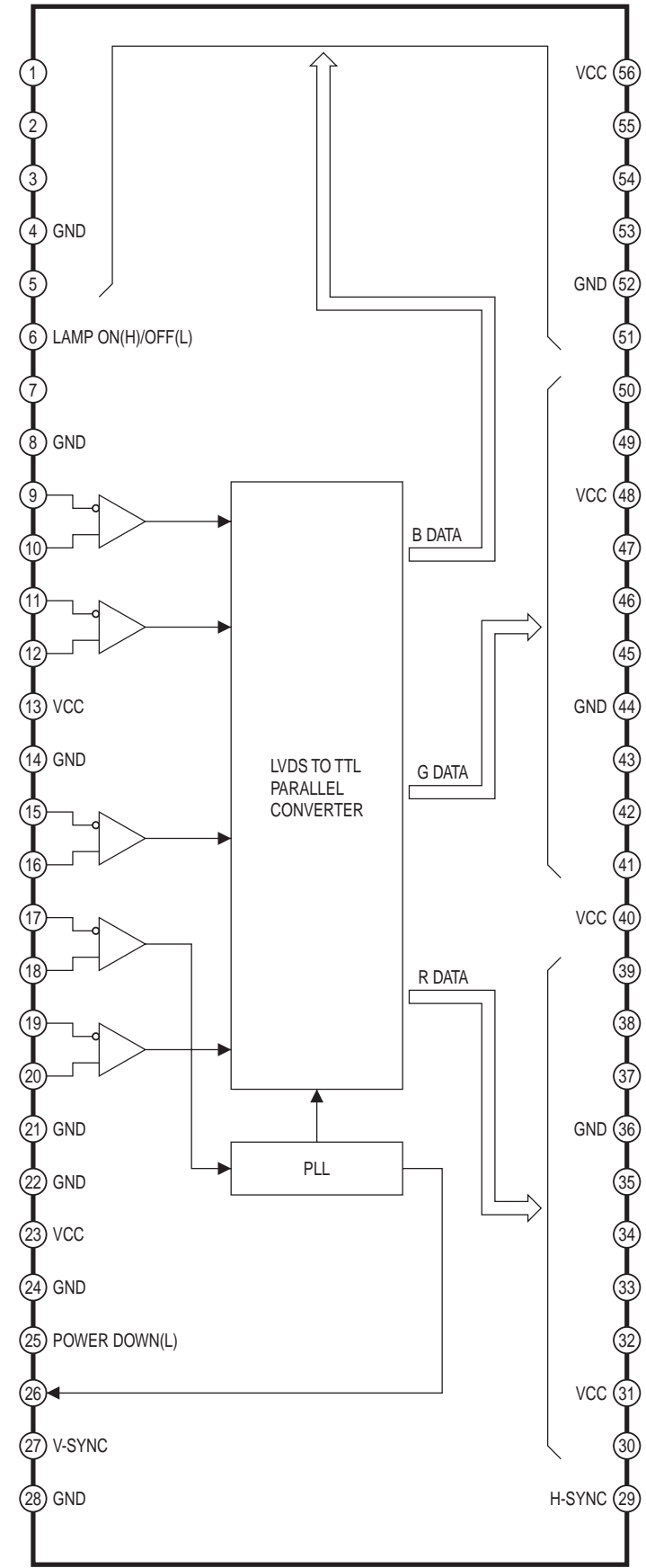
LCD DRIVE I SCHEMATIC DIAGRAM (2/2)

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

I/O CHART OF IC2503

Pin No.	I/O	Signal Name	Description	Pin No.	I/O	Signal Name	Description	Pin No.	I/O	Signal Name	Description	Pin No.	I/O	Signal Name	Description	Pin No.	I/O	Signal Name	Description
A1	I	HSYNC	H-SYNC	D6	-	GND	GND	H17	I	VDD2	+3.3V	N16	I	VDD2	+3.3V	U17	-	GND	GND
A2	I	VSYNC	V-SYNC	D7	I	VDD1	+1.2V	H18	O	CLYOUTB	Y DIRECTION CLOCK(B)	N17	I	VDD2	+3.3V	U18	O	B1OUT7	B1 DATA 7
A3	-	HRESETO	(Not used)	D8	I	VDD1	+1.2V	H19	O	DYOUTB	Y DIRECTION SHIFT DATA	N18	O	B2OUT6	B2 DATA 6	U19	O	B1OUT6	B1 DATA 6
A4	-	VRESETO	(Not used)	D9	I	VDD1	+1.2V	H20	-	CLXOUTB	(Not used)	N19	O	B2OUT5	B2 DATA 5	U20	O	B1OUT5	B1 DATA 5
A5	-	OSDRINO	(Not used)	D10	I	VDD1	+1.2V	J1	O	R1OUT7	R1 DATA 7	N20	O	B2OUT4	B2 DATA 4	V1	-	ENBY1R	(Not used)
A6	I	SELECT	COREECT ON(L)	D11	I	VDD1	+1.2V	J2	O	R1OUT8	R1 DATA 8	P1	O	R2OUT2	R2 DATA 2	V2	-	ENBY2R	(Not used)
A7	-	OSDSW	(Not used)	D12	I	VDD1	+1.2V	J3	O	R1OUT9	R1 DATA 9	P2	O	R2OUT3	R2 DATA 3	V3	-	GND	GND
A8	I	RIN7	R DATA 5	D13	I	VDD1	+1.2V	J4	I	VDD2	+3.3V	P3	O	R2OUT4	R2 DATA 4	V4	-	TEST5	(Not used)
A9	I	RIN4	R DATA 2	D14	-	GND	GND	J5	I	VDD2	+3.3V	P4	I	VDD2	+3.3V	V5	O	DIRXR	DIRECTION-X (R/B) CONTROL
A10	-	RIN1	(Not used)	D15	-	GND	GND	J9	-	GND	GND	P5	I	VDD2	+3.3V	V6	O	G1OUT9	G1 DATA 9
A11	I	GIN8	G DATA 6	D16	-	GND	GND	J10	-	GND	GND	P15	-	GND	GND	V7	I	VDD2	+3.3V
A12	I	GIN5	G DATA 3	D17	-	GND	GND	J11	-	GND	GND	P16	-	GND	GND	V8	O	G1OUT4	G1 DATA 4
A13	I	GIN2	G DATA 0	D18	-	TEST3	(Not used)	J12	-	GND	GND	P17	-	GND	GND	V9	O	G1OUT1	G1 DATA 1
A14	-	GIN0	(Not used)	D19	I	VDD2	+3.3V	J16	I	VDD2	+3.3V	P18	I	VDD2	+3.3V	V10	O	G2OUT8	G2 DATA 8
A15	I	BIN7	B DATA 5	D20	-	SHENB	(Not used)	J17	I	VDD2	+3.3V	P19	O	B2OUT8	B2 DATA 8	V11	O	G2OUT5	G2 DATA 5
A16	I	BIN4	B DATA 2	E1	I	DCLK	CLOCK(76MHz)	J18	-	SHCLKBN	(Not used)	P20	O	B2OUT7	B2 DATA 7	V12	O	G2OUT2	G2 DATA 2
A17	-	BIN1	(Not used)	E2	-	TEST6	(Not used)	J19	O	ENBY2B	ENABLE-Y2 PULSE	R1	O	SHCLKR	SAMPLING & HOLD(R) CLOCK	V13	O	SHCLKG	SAMPLING & HOLD(G) CLOCK
A18	-	BIN0	(Not used)	E3	-	TRST	(Not used)	J20	O	ENBY1B	ENABLE-Y1 PULSE	R2	O	R2OUT0	R2 DATA 0	V14	O	STSQOG	STSQO(G) PULSE
A19	I	SCLK	SERIAL CLOCK	E4	-	GND	GND	K1	O	R1OUT4	R1 DATA 4	R3	O	R2OUT1	R2 DATA 1	V15	-	ENBY2G	(Not used)
A20	I	SCS	CS(L)	E5	-	GND	GND	K2	O	R1OUT5	R1 DATA 5	R4	-	GND	GND	V16	-	DYOUTG	(Not used)
B1	-	HPLL	(Not used)	E6	-	GND	GND	K3	O	R1OUT6	R1 DATA 6	R5	-	GND	GND	V17	-	TEST4	(Not used)
B2	-	HSI	(Not used)	E7	I	VDD1	+1.2V	K4	I	VDD2	+3.3V	R6	-	GND	GND	V18	-	GND	GND
B3	-	HSO	(Not used)	E8	I	VDD1	+1.2V	K5	I	VDD2	+3.3V	R7	-	GND	GND	V19	O	B1OUT9	B1 DATA 9
B4	-	TDI	(Not used)	E9	I	VDD1	+1.2V	K9	-	GND	GND	R15	-	GND	GND	V20	O	B1OUT8	B1 DATA 8
B5	-	OSDRIN1	(Not used)	E10	I	VDD1	+1.2V	K10	-	GND	GND	R16	-	GND	GND	W1	-	CLYOUTR	(Not used)
B6	-	OSDGIN0	(Not used)	E11	I	VDD1	+1.2V	K11	-	GND	GND	R17	-	GND	GND	W2	-	DXOUTR	(Not used)
B7	-	OSDBIN0	(Not used)	E12	I	VDD1	+1.2V	K12	-	GND	GND	R18	O	B1OUT1	B1 DATA 1	W3	-	CLXOUTR	(Not used)
B8	I	RIN8	R DATA 6	E13	I	VDD1	+1.2V	K16	I	VDD2	+3.3V	R19	O	B1OUT0	B1 DATA 0	W4	-	ENBX3R	(Not used)
B9	I	RIN5	R DATA 3	E14	-	GND	GND	K17	I	VDD2	+3.3V	R20	O	B2OUT9	B2 DATA 9	W5	-	DIRXRN	(Not used)
B10	I	RIN2	R DATA 0	E15	-	GND	GND	K18	-	STSQEB	(Not used)	T1	O	STSQOR	STSQO(R) PULSE	W6	O	G1OUT8	G1 DATA 8
B11	I	GIN9	G DATA 7	E16	-	GND	GND	K19	O	STSQOB	STSQO(B) PULSE	T2	-	STSQER	(Not used)	W7	O	G1OUT6	G1 DATA 6
B12	I	GIN6	G DATA 4	E17	-	GND	GND	K20	O	FRPB	FRP(B) PULSE	T3	O	XFRR	XFR(R) PULSE	W8	O	G1OUT3	G1 DATA 3
B13	I	GIN3	G DATA 1	E18	-	DIRXB	(Not used)	L1	O	R1OUT1	R1 DATA 1	T4	-	GND	GND	W9	O	G1OUT0	G1 DATA 0
B14	-	GIN1	(Not used)	E19	-	DIRXBN	(Not used)	L2	O	R1OUT2	R1 DATA 2	T5	-	GND	GND	W10	O	G2OUT7	G2 DATA 7
B15	I	BIN8	B DATA 6	E20	I	RESET	RESET(L)	L3	O	R1OUT3	R1 DATA 3	T6	-	GND	GND	W11	O	G2OUT4	G2 DATA 4
B16	I	BIN5	B DATA 3	F1	I	VDDP	+1.2V	L4	I	VDD2	+3.3V	T7	-	GND	GND	W12	O	G2OUT1	G2 DATA 1
B17	I	BIN2	B DATA 0	F2	-	GNDP	GND	L5	I	VDD2	+3.3V	T8	I	VDD1	+1.2V	W13	O	XFRG	XFR(G) PULSE
B18	-	TEST2	(Not used)	F3	-	TD0	(Not used)	L9	-	GND	GND	T9	I	VDD1	+1.2V	W14	O	FRPG	FRP(G) PULSE
B19	-	DIRY	(Not used)	F4	-	GND	GND	L10	-	GND	GND	T10	I	VDD1	+1.2V	W15	-	ENBY1G	(Not used)
B20	I	SDATA	SERIAL DATA	F5	-	GND	GND	L11	-	GND	GND	T11	I	VDD1	+1.2V	W16	O	CLXOUTG	X DIRECTION CLOCK(G)
C1	-	CLP1	(Not used)	F6	-	GND	GND	L12	-	GND	GND	T12	I	VDD1	+1.2V	W17	I	VDD2	+3.3V
C2	-	CLP2	(Not used)	F14	-	GND	GND	L16	I	VDD2	+3.3V	T13	I	VDD1	+1.2V	W18	-	ENBX4G	(Not used)
C3	-	GND	GND	F15	-	GND	GND	L17	I	VDD2	+3.3V	T14	I	VDD1	+1.2V	W19	-	DIRXGN	(Not used)
C4	-	TMS	(Not used)	F16	-	GND	GND	L18	O	B2OUT0	B2 DATA 0	T15	-	GND	GND	W20	O	DIRKG	DIRECTION-X (G) CONTROL
C5	I	VDD2	+3.3V	F17	-	GND	GND	L19	O	SHCLKB	SAMPLING & HOLD(B) CLOCK	T16	-	GND	GND	Y1	-	DYOUTR	(Not used)
C6	-	OSDGIN1	(Not used)	F18	-	ENBX3B	(Not used)	L20	O	XFRB	XFR(B) PULSE	T17	-	GND	GND	Y2	-	ENBX5R	(Not used)
C7	-	OSDBIN1	(Not used)	F19	-	ENBX2B	(Not used)	M1	O	R2OUT8	R2 DATA 8	T18	O	B1OUT4	B1 DATA 4	Y3	-	ENBX4R	(Not used)
C8	I	RIN9	R DATA 7	F20	-	ENBX1B	(Not used)	M2	O	R2OUT9	R2 DATA 9	T19	O	B1OUT3	B1 DATA 3	Y4	-	ENBX2R	(Not used)
C9	I	RIN6	R DATA 4	G1	-	TEST7	(Not used)	M3	O	R2OUT0	R1 DATA 0	T20	O	B1OUT2	B1 DATA 2	Y5	-	ENBX1R	(Not used)
C10	I	RIN3	R DATA 0	G2	-	TEST9	(Not used)	M4	I	VDD2	+3.3V	U1	-	SHCLKRN	(Not used)	Y6	O	G1OUT7	G1 DATA 7
C11	-	RIN0	(Not used)	G3	I	VDD2	+3.3V	M5	I	VDD2	+3.3V	U2	I	VDD2	+3.3V	Y7	O	G1OUT5	G1 DATA 5
C12	I	GIN7	G DATA 5	G4	-	GND	GND	M9	-	GND	GND	U3	-	FRPR	(Not used)	Y8	O	G1OUT2	G1 DATA 2
C13	I	GIN4	G DATA 2	G5	-	GND	GND	M10	-	GND	GND	U4	-	GND	GND	Y9	O	G2OUT9	G2 DATA 9
C14	I	VDD2	+3.3V	G6	-	GND	GND	M11	-	GND	GND	U5	-	GND	GND	Y10	O	G2OUT6	G2 DATA 6
C15	I	BIN9	B DATA 7	G16	I	VDD2	+3.3V	M12	-	GND	GND	U6	-	GND	GND	Y11	O	G2OUT3	G2 DATA 3
C16	I	BIN6	B DATA 4	G17	I	VDD2	+3.3V	M16	I	VDD2	+3.3V	U7	-	GND	GND	Y12	O	G2OUT0	G2 DATA 0
C17	I	BIN3	B DATA 1	G18	-	DXOUTB	(Not used)	M17	I	VDD2	+3.3V	U8	I	VDD1	+1.2V	Y13	-	STSQEG	(Not used)
C18	-	GND	GND	G19	-	ENBX5B	(Not used)	M18	O	B2OUT3	B2 DATA 3	U9	I	VDD1	+1.2V	Y14	-	SHCLKGN	(Not used)
C19	-	TEST1	(Not used)	G20	-	ENBX4B	(Not used)	M19	O	B2OUT2	B2 DATA 2	U10	I	VDD1	+1.2V	Y15	-	CLYOUTG	(Not used)
C20	O	NRG	NRG PULSE	H1	-	VSEL	(Not used)	M20	O	B2OUT1	B2 DATA 1	U11	I	VDD1	+1.2V	Y16	O	DXOUTG	X DIRECTION SHIFT DATA
D1	-	PLI	(Not used)	H2	I	EN	PLL ENABLE(L)	N1	O	R2OUT5	R2 DATA 5	U12	I	VDD1	+1.2V	Y17	-	ENBX5G	(Not used)
D2	-	PLO	(Not used)	H3	-	TEST8	(Not used)	N2	O	R2OUT6	R2 DATA 6	U13	I	VDD1	+1.2V	Y18	-	ENBX3G	(Not used)
D3	-	TCK	(Not used)	H4	I	VDD2	+3.3V	N3	O	R2OUT7	R2 DATA 7	U14	I	VDD1	+1.2V	Y19	-	ENBX2G	(Not used)
D4	-	GND	GND	H5	I	VDD2	+3.3V	N4	I	VDD2	+3.3V	U15	-	GND	GND	Y20	O	ENBX1G	ENABLE-X1 PULSE
D5	-	GND	GND	H16	I	VDD2	+3.3V	N5	I	VDD2	+3.3V	U16	-	GND	GND				

IC2504 DETAIL BLOCK DIAGRAM



IC2504 DETAIL BLOCK DIAGRAM

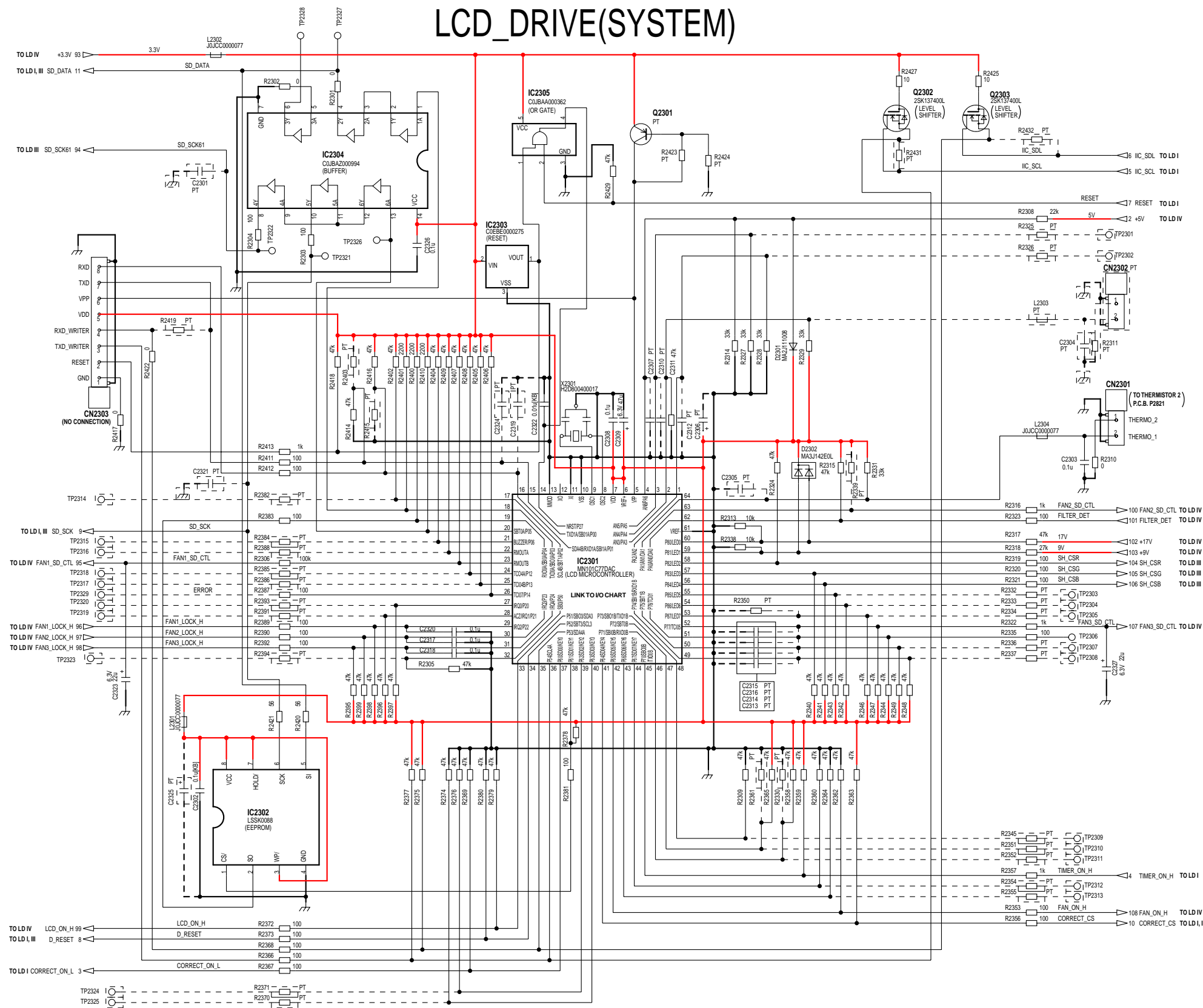
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LCD DRIVE II SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.



I/O CHART OF IC2301

Pin No.	I/O	Signal Name	Description
1	-	AN3 / PA3	(Not used)
2	I	AN4 / PA4	TEMPERATURE DATA3 (FROM THERMISTOR 1 P.C. B.)
3	-	AN5 / PA5	(Not used)
4	I	AN6 / PA6	+5V LINE DETECT※1
5	-	NC	(Not used)
6	I	VREF+	V-REF FOR IC2301
7	I	VDD	VDD (+3.3V)
8	O	OSC2	8MHz OSCILLATION
9	I	OSC1	8MHz OSCILLATION
10	-	VSS	GND
11	-	XI	(Not used)
12	-	XO	(Not used)
13	-	MMOD	(Not used)
14	I	NRST	RESET (L)
15	O	TXD	RS232C TRANSMITTED DATA
16	I	RXD	RS232C RECEIVED DATA
17	-	SCL	(Not used)
18	O	SD_DATA	SERIAL DATA 0
19	I	RXD0A	SERIAL DATA 1
20	O	SD_LOCK	SERIAL CLOCK
21	-	BUZZER	(Not used)
22	-	RMOUTA	(Not used)
23	O	FAN1_SD_CTL	FAN1 SPEED CONTROL
24	-	TCO4A / P12	(Not used)
25	-	FAN2_SD_CTL	(Not used)
26	-	ERROR	(Not used)
27	-	IRQ0 / P20	(Not used)
28	-	ACZ / IRQ1 / P21	(Not used)
29	I	FAN1_LOCK_H	FAN1 LOCK (H)
30	I	FAN2_LOCK_H	FAN2 LOCK (H)
31	I	FAN3_LOCK_H	FAN3 LOCK (H)
32	-	DIR_Y	(Not used)

Pin No.	I/O	Signal Name	Description
33	O	LCD_ON_H	+15.5V (LCD DRIVE) ON (H)
34	O	D_RESET	RESET (L)
35	I	RXD0B	I ² C SERIAL DATA
36	I	WRITER_CLK	I ² C SERIAL CLOCK
37	O	CORRECT_ON_L	NON-UNIFORMITY COLOR CORRECT ON (L)
38	O	EEP_CS	EEPROM CS (L)
39	-	DIR_X	(Not used)
40	-	XDIR_X	(Not used)
41	O	CORRECT_CS	IC2503 / IC2007 / IC2008 / IC2009 CS(L)
42	O	FAN1_ON_H	FAN ON (H)
43	-	FAN2_ON_H	(Not used)
44	-	FAN3_ON_H	(Not used)
45	I	TIMER_ON_H	LAMP ON (H) / OFF (L)
46	-	D4H / D5L	(Not used)
47	-	CHAMP_L	(Not used)
48	-	P73 / SB01B / TXD18	(Not used)
49	-	THERMO_IN	(Not used)
50	-	PA1 / AN1 / DA1	(Not used)
51	-	15.5ADJ	(Not used)
52	O	P77 / TCI05	FAN3 SPEED CONTROL
53	-	P87 / LED7	(Not used)
54	-	P86 / LED6	(Not used)
55	-	P85 / LED5	(Not used)
56	O	P84 / LED4	SAMPLING HOLD BLUE CS (L)
57	O	P83 / LED3	SAMPLING HOLD GREEN CS (L)
58	O	P82 / LED2	SAMPLING HOLD RED CS (L)
59	I	P81 / LED1	+9V LINE DETECT※1
60	I	P80 / LED0	+17V LINE DETECT※1
61	-	VREF-	(Not used)
62	I	P76 / TC101	FILTER ERROR DETECTION
63	O	P75 / SBT18	FAN2 SPEED CONTROL
64	I	P74 / SB11B / RXD1B	TEMPERATURE DATA 1 (FROM THERMISTOR 2 P.C. B.)

※1

Pin No.	Description
4	VOLTAGE DETECTION FOR ERROR LED INDICATION WHEN THE VOLTAGE BECOMES LESS THAN 2.5V.
59	VOLTAGE DETECTION FOR ERROR LED INDICATION WHEN THE VOLTAGE BECOMES LESS THAN 6.5V.
60	VOLTAGE DETECTION FOR ERROR LED INDICATION WHEN THE VOLTAGE BECOMES LESS THAN 12V.

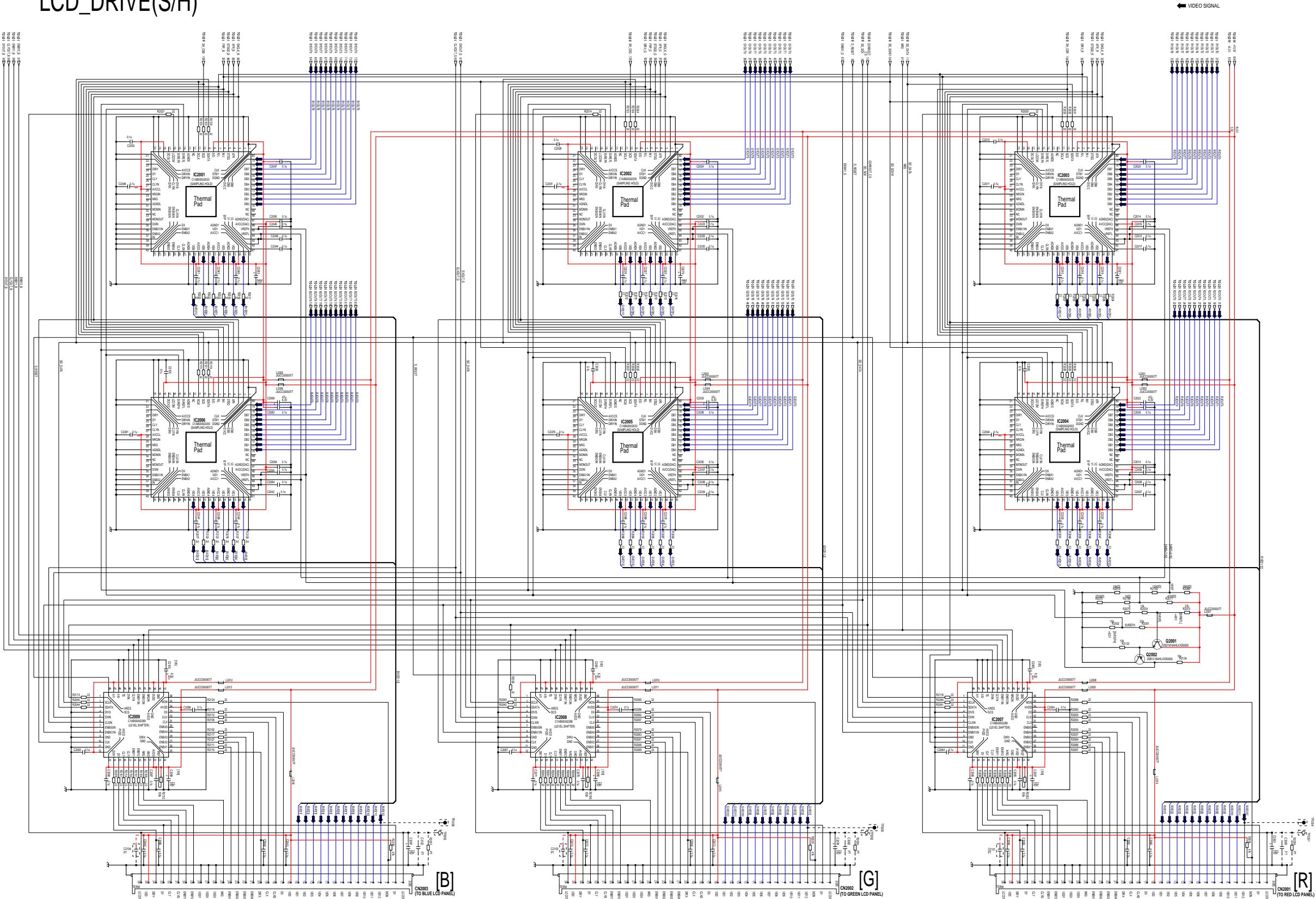
LCD DRIVE III SCHEMATIC DIAGRAM

LCD_DRIVE(S/H)

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.



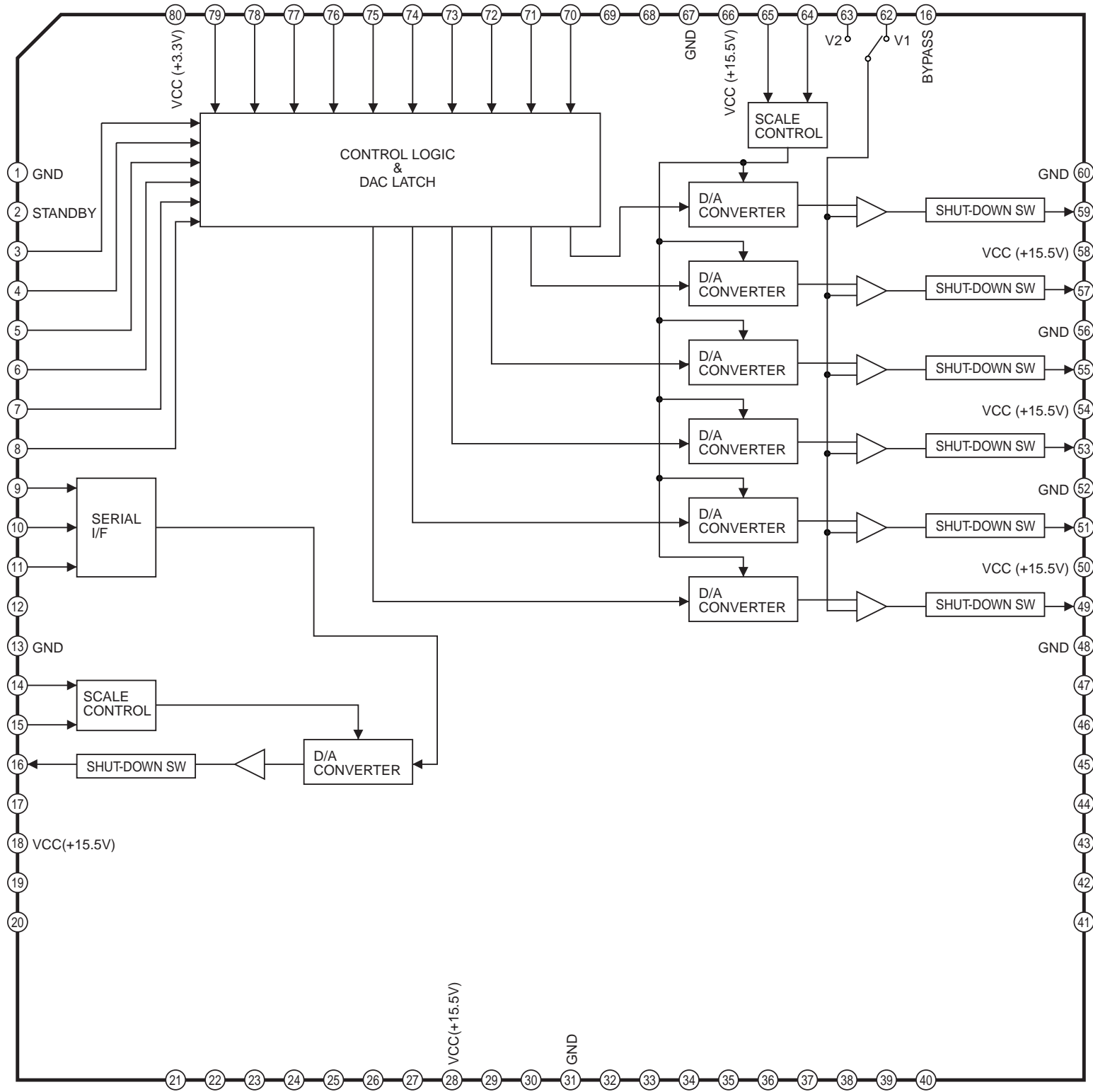
LINK TO VOLTAGE CHART

LSJB3212

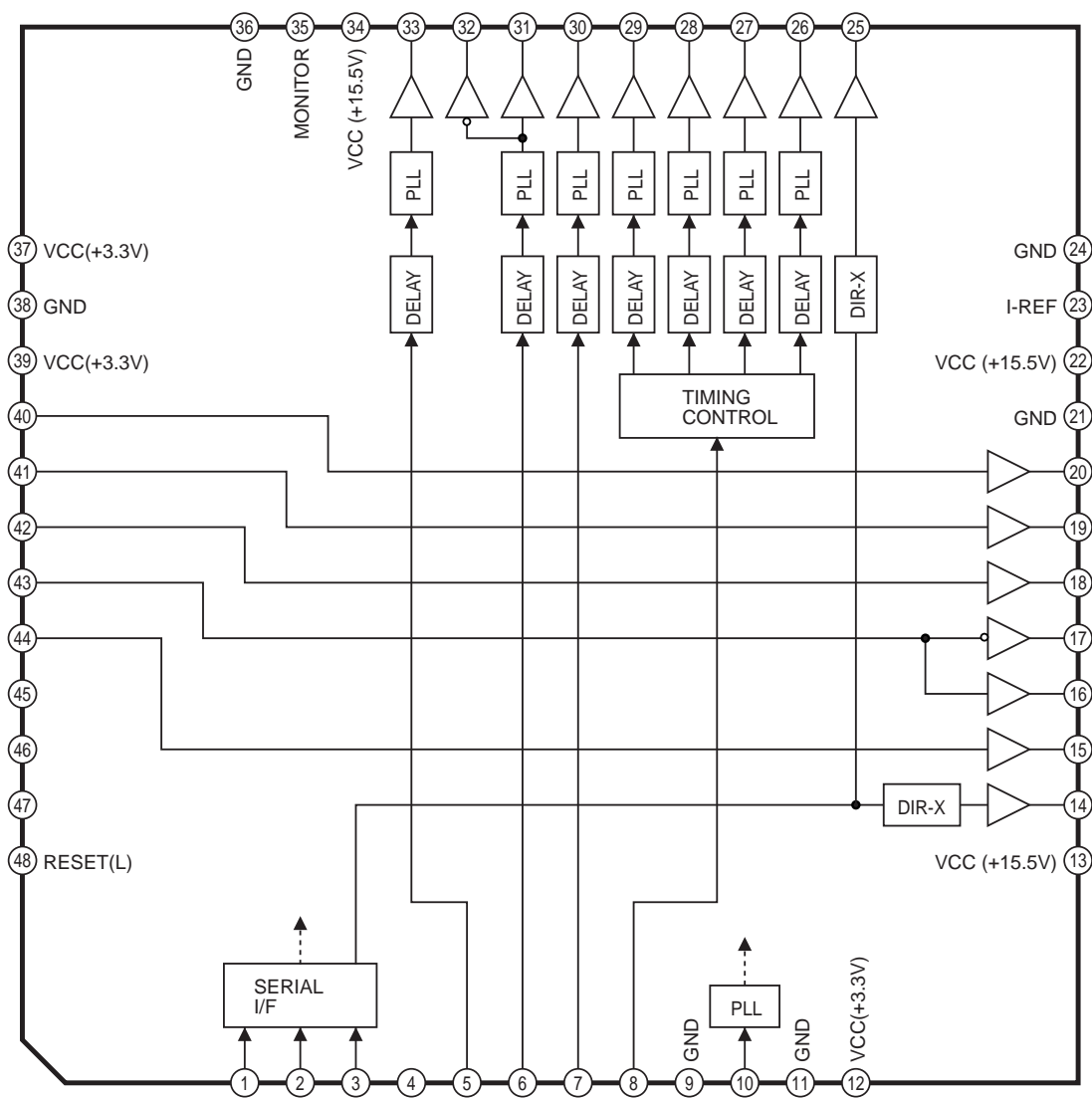
LCD DRIVE III SCHEMATIC DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

IC2001 / IC2002 / IC2003 / IC2004 / IC2005 / IC2006 DETAIL BLOCK DIAGRAM



IC2007 / IC2008 / IC2009 DETAIL BLOCK DIAGRAM



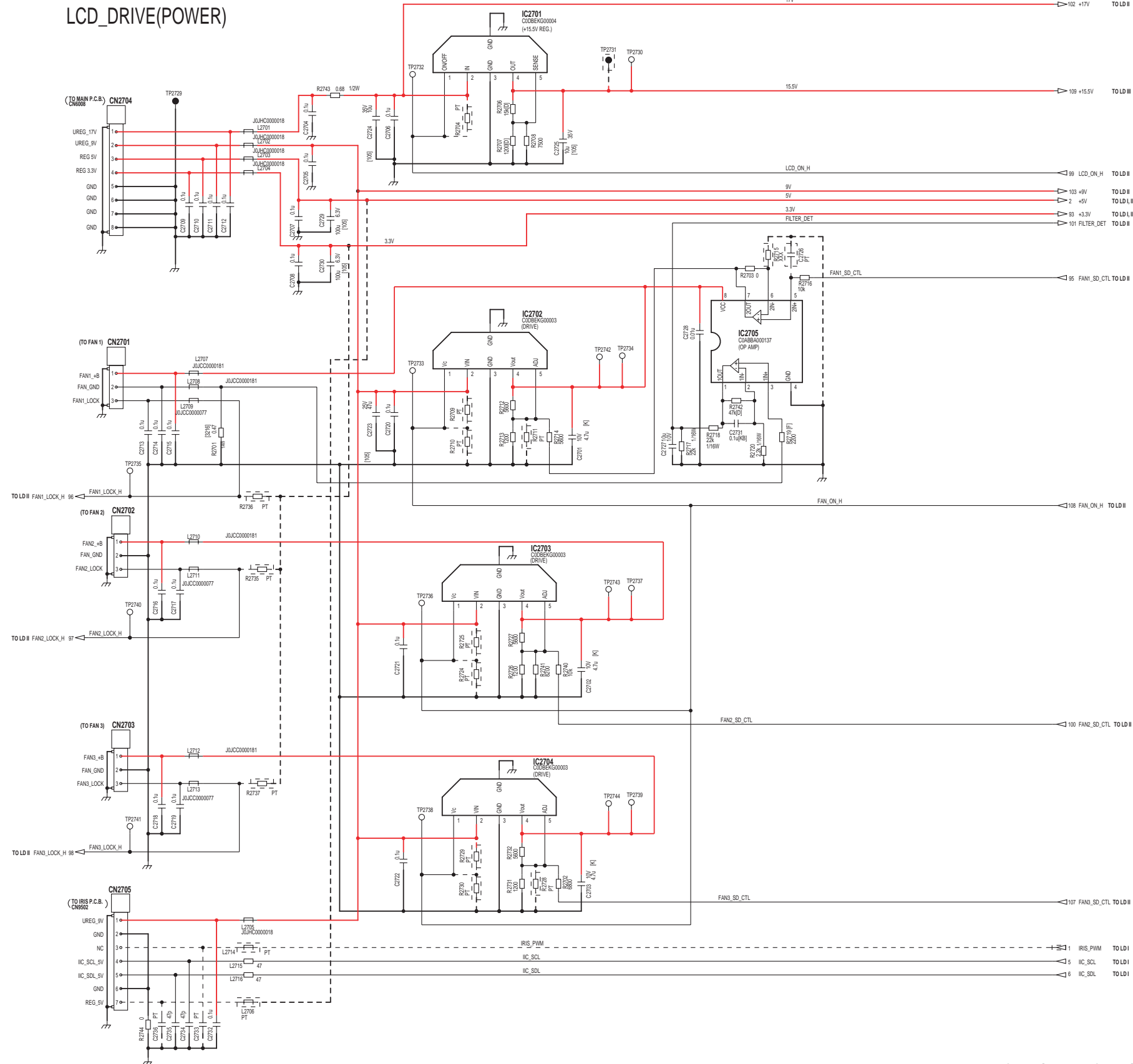
IC2001 / IC2002 / IC2003 / IC2004 / IC2005 / IC2006 DETAIL BLOCK DIAGRAM
IC2007 / IC2008 / IC2009 DETAIL BLOCK DIAGRAM

LCD DRIVE IV SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.



LINK TO VOLTAGE CHART

LSJB3212

LCD DRIVE IV SCHEMATIC DIAGRAM

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

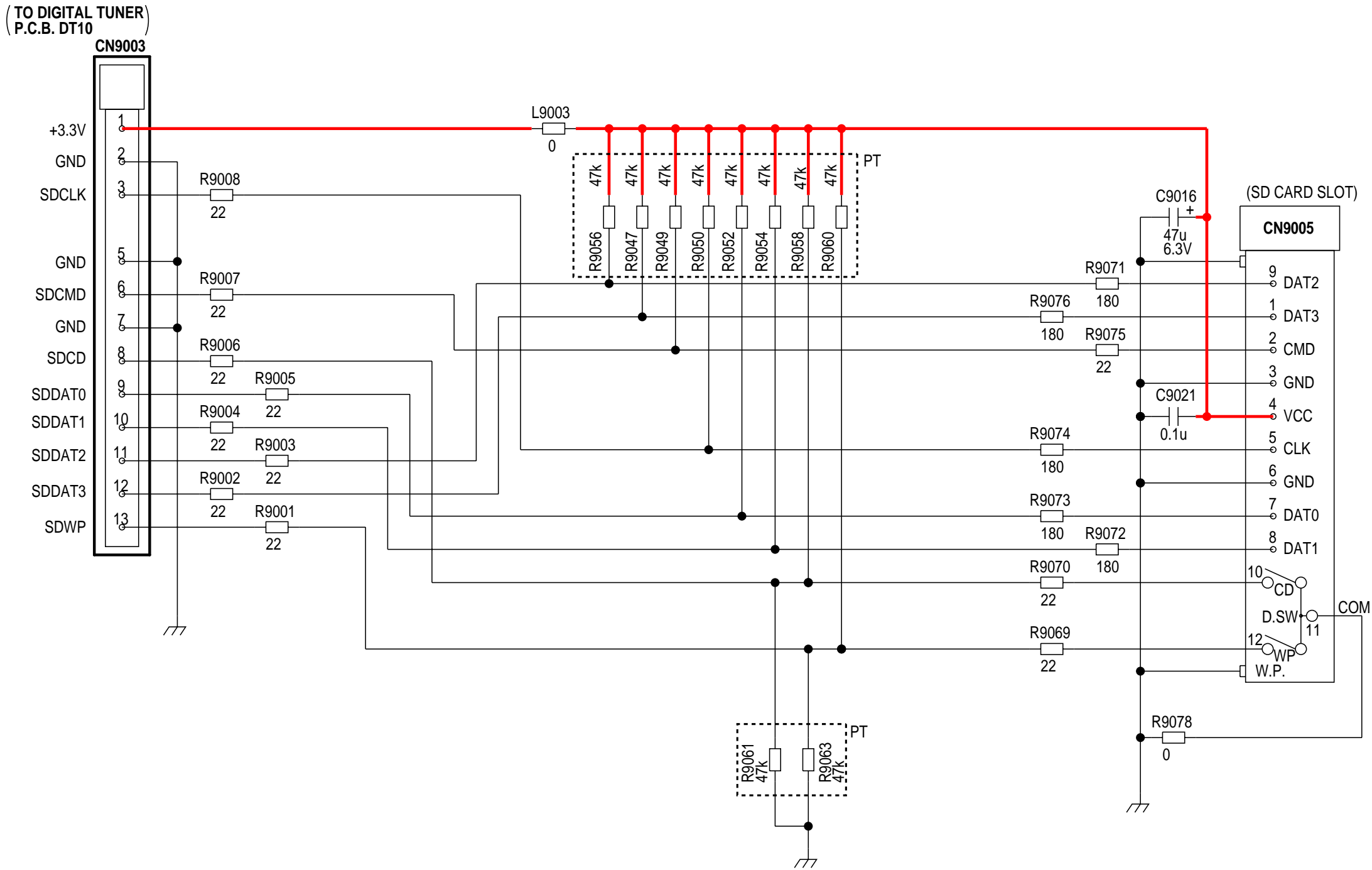
13.7. SD CARD SCHEMATIC DIAGRAM

SD CARD SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.



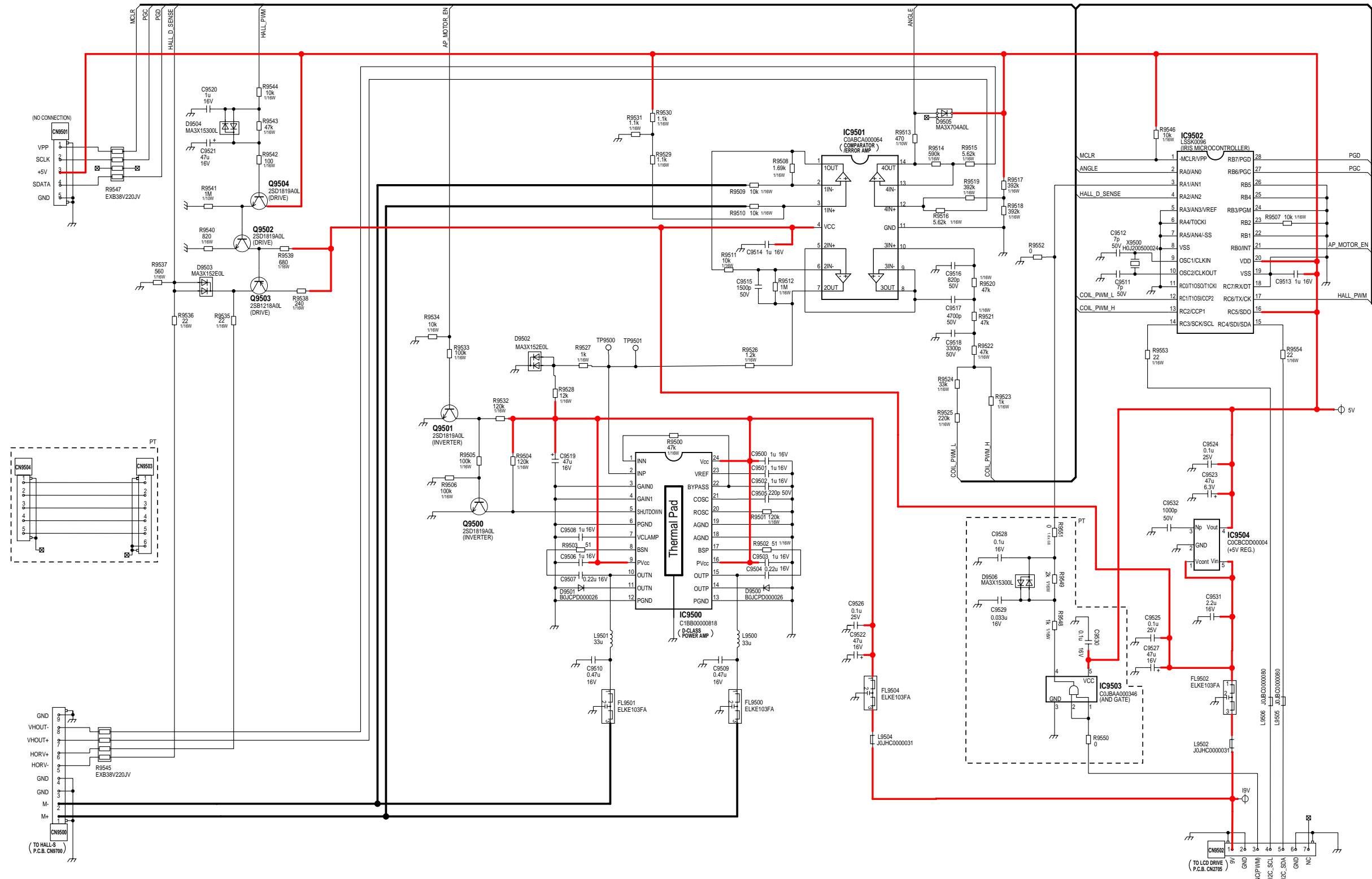
13.8. IRIS SCHEMATIC DIAGRAM

IRIS SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.



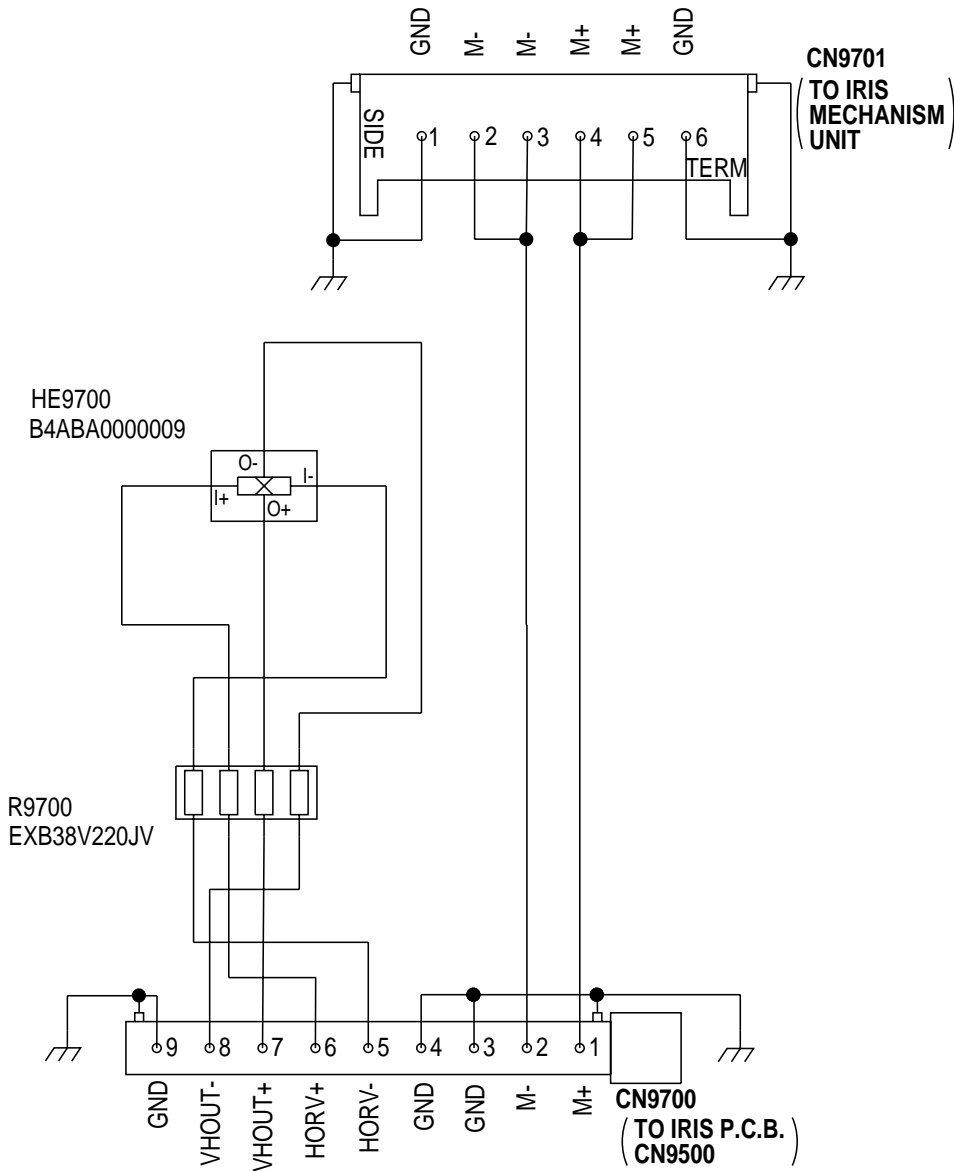
13.9. HALL-S SCHEMATIC DIAGRAM

HALL-S SCHEMATIC DIAGRAM

NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

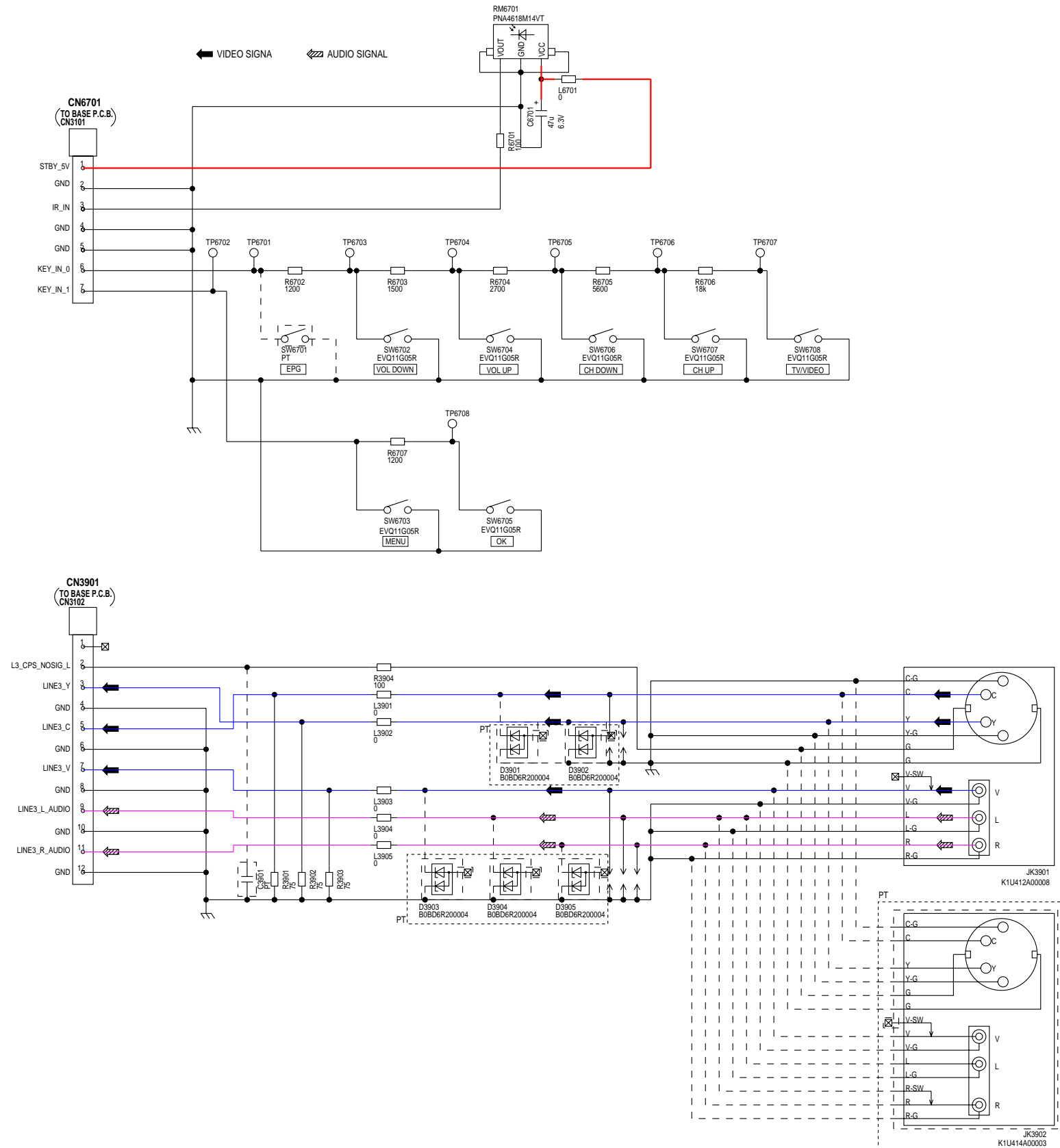
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
PARTS MARKED "PT" ARE NOT USED.



13.10. FRONT JACK / OPERATION SCHEMATIC DIAGRAM

FRONT JACK / OPERATION SCHEMATIC DIAGRAM



NOTE: For placing a purchase order of the parts, be sure to use the part number listed in the parts list. Do not use the part number on this diagram.

NOTE: FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES, REFER TO BEGINNING OF SCHEMATIC SECTION.


NOTE: PARTS MARKED "PT" ARE NOT USED.

13.11. POWER SWITCH / THERMISTOR 2 / COVER SWITCH SCHEMATIC DIAGRAMS

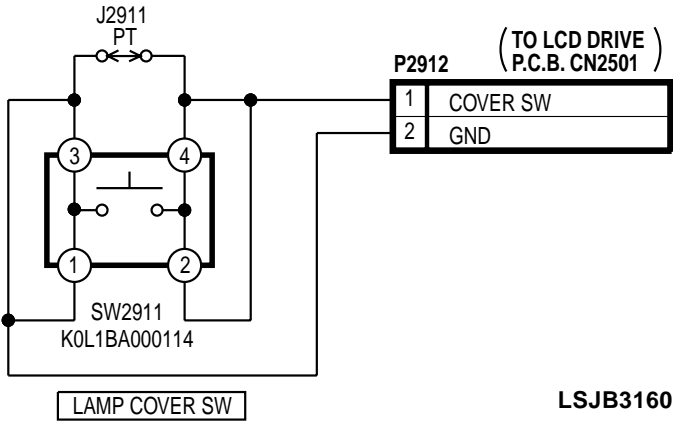
NOTE: For placing a purchase order of the parts,
be sure to use the part number listed in the parts list.
Do not use the part number on this diagram.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

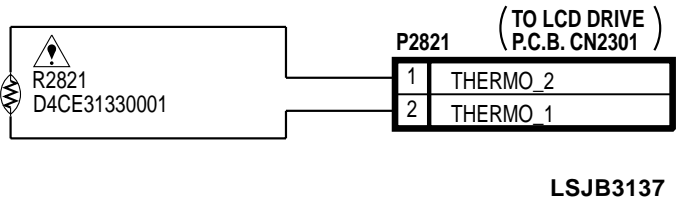
NOTE:
PARTS MARKED "PT" ARE NOT USED.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN  HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

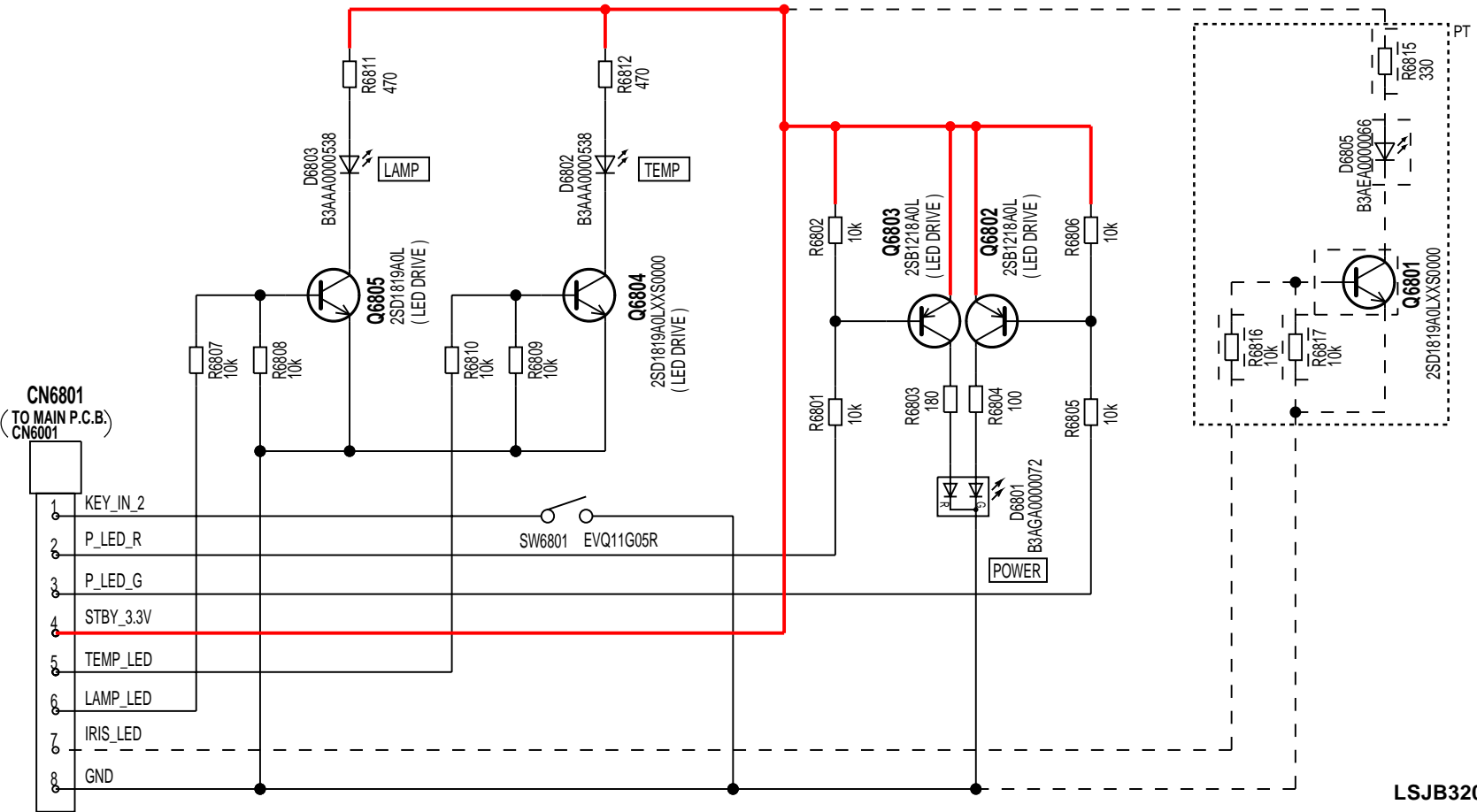
COVER SWITCH SCHEMATIC DIAGRAM



THERMISTOR 2 SCHEMATIC DIAGRAM



POWER SWITCH SCHEMATIC DIAGRAM



[LINK TO VOLTAGE CHART](#)
COVER SWITCH SCHEMATIC DIAGRAM
POVER SWITCH SCHEMATIC DIAGRAM
THERMISTOR 2 SCHEMATIC DIAGRAM
PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16
/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

13.12. VOLTAGE CHART

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

MAIN P.C.B.

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
IC1100		4	0	59	1.0	1	2.6	14	3.5	37	1.3	12	0	67	0.7	122	3.5	45	0
1	3.5	5	0	60	0	2	0	15	0	38	1.5	13	3.5	68	0	123	0.1	46	0
2	3.5	6	3.5	61	1.8	3	2.6	16	3.5	39	1.4	14	0	69	3.5	124	0.1	47	3.3
3	9.0	7	1.9	62	1.2	4	---	IC5012		40	1.3	15	0	70	0.7	125	0.1	48	1.8
4	9.0	8	1.3	63	3.4	5	1.9	1	1.5	41	1.3	16	3.5	71	0.7	126	0.1	49	---
5	9.0	9	1.4	64	1.7	IC5006		2	3.4	42	1.4	17	0	72	0	127	0	50	0
6	9.0	10	1.7	65	2.0	1	3.4	3	0	43	0	18	0	73	0	128	1.9	51	3.5
7	5.8	11	0	66	0	2	---	4	1.3	44	3.5	19	3.5	74	1.9	129	0	52	0
8	9.4	12	1.9	67	0.9	3	0	5	3.5	45	1.3	20	0.2	75	0	130	0.1	53	3.2
9	0	13	0	68	1.2	4	2.1	6	3.2	46	1.5	21	0	76	3.5	131	0.1	54	3.2
10	2.5	14	0.2	69	0.6	5	5.1	7	---	47	1.3	22	1.9	77	0	132	0.1	55	0
11	5.0	15	---	70	0	6	---	8	---	48	1.4	23	1.9	78	3.3	133	0.1	56	0
12	1.8	16	0	71	0	7	---	IC5022		49	0	24	0	79	1.9	134	3.5	57	0
13	2.5	17	0	72	1.6	8	5.0	1	---	50	0	25	0	80	0	135	0	58	3.3
14	4.5	18	3.5	73	0	IC5007		2	3.3	51	3.5	26	3.5	81	0	136	0.1	59	3.3
15	3.5	19	0	74	1.6	1	2.6	3	0	52	3.4	27	3.0	82	0	137	---	60	0
16	3.6	20	---	75	0	2	0	4	3.1	53	0	28	3.0	83	0	138	0	61	0
17	0	21	---	76	2.0	3	2.6	5	3.5	54	1.3	29	4.5	84	0.1	139	1.9	62	3.3
18	0	22	0	77	1.1	4	---	IC5700		55	1.3	30	4.5	85	0.1	140	---	63	0
19	9.0	23	1.4	78	3.1	5	1.9	1	3.5	56	0.7	31	3.5	86	0.1	141	0.1	64	0
20	6.5	24	0.6	79	0	IC5008		2	1.2	IC5701		32	3.5	87	0.1	142	0.1	65	3.3
21	3.2	25	0.5	80	0	1	0	3	0.4	1	5.1	33	0	88	0	143	---	66	1.7
22	3.5	26	0.5	81	2.9	2	2.2	4	0.9	2	0	34	0	89	3.5	144	---	67	0
23	3.5	27	0.5	82	3.0	3	0	5	0	3	1.4	35	1.9	90	0	IC5802		68	1.8
24	3.5	28	0.5	83	0	4	0	6	0.4	4	3.5	36	0	91	0	1	0	69	0
25	3.5	29	0.6	84	0	5	2.4	7	0.6	5	5.1	37	3.5	92	1.9	2	0	70	2.5
26	0	30	0.5	85	0	6	---	8	1.3	IC5800		38	3.5	93	0.1	3	0	71	1.3
IC1102		31	1.6	86	0	7	3.5	9	3.5	1	0	39	0.7	94	1.9	4	0	72	1.3
1	9.0	32	0	87	0	8	3.5	10	1.3	2	1.7	40	0.7	95	0	5	4.5	73	0
2	5.2	33	0	88	0	IC5009		11	1.0	3	0	41	0	96	3.5	6	4.5	74	---
3	0	34	---	89	0	1	2.5	12	0.9	4	1.7	42	3.5	97	3.2	7	4.5	75	---
4	1.1	35	0.8	90	1.9	2	2.5	13	0	5	3.3	43	0.7	98	3.5	8	4.5	76	1.5
5	9.0	36	0.8	91	1.5	3	1.3	14	0.9	6	0	44	0.7	99	3.5	IC5803		77	3.3
IC1103		37	---	92	1.9	4	---	15	0.8	7	5.1	45	0	100	0.1	1	0	78	0.9
1	9.0	38	1.5	93	1.1	5	0	16	0.4	8	5.1	46	3.5	101	0	2	0	79	2.6
2	2.6	39	1.9	94	1.0	IC5010		17	0	9	5.1	47	0.7	102	3.3	3	0	80	2.3
3	0	40	0	95	0	1	2.6	18	0.6	10	3.8	48	0.7	103	0	4	0	81	---
4	1.1	41	0.5	96	0	2	0	19	1.3	11	3.8	49	0	104	0.4	5	4.5	82	3.3
5	9.0	42	0.8	97	0	3	2.6	20	1.3	12	0	50	3.5	105	1.9	6	4.5	83	0
IC1104		43	---	98	0.8	4	---	21	0	13	0	51	0.7	106	0	7	4.5	84	2.5
1	7.1	44	---	99	0	5	1.3	22	1.2	14	5.1	52	0.7	107	0	8	4.5	85	2.5
2	0	45	---	100	0	IC5011		23	1.0	15	---	53	0	108	0	IC5804		86	3.3
3	1.4	46	0.8	IC5003		1	1.8	24	0.9	16	---	54	0	109	0.1	1	4.5	87	0.2
4	5.1	47	1.9	1	3.5	2	3.5	25	1.0	IC5801		55	3.5	110	0.1	2	4.5	88	3.5
5	7.1	48	1.9	2	3.5	3	0	26	3.5	1	0	56	0.8	111	0.1	3	4.5	89	3.3
IC1105		49	0	3	0	4	1.5	27	0.9	2	0	57	3.5	112	0.1	4	0	90	2.8
1	4.7	50	0	4	2.6	5	1.5	28	1.1	3	0	58	0.7	113	0.1	5	4.5	91	0
2	0	51	0	5	1.4	6	1.4	29	0	4	0	59	0.7	114	1.9	6	4.5	92	0
3	1.5	52	0.3	IC5004		7	1.5	30	3.3	5	3.5	60	0	115	0	7	4.5	93	1.8
4	3.4	53	0	1	2.6	8	1.8	31	1.8	6	3.5	61	3.5	116	0.1	8	9.0	94	1.0
5	4.7	54	0	2	0	9	---	32	3.2	7	3.5	62	0.7	117	0.1	IC5805		95	0
IC5000		55	0	3	2.6	10	1.0	33	0	8	0	63	0.7	118	0.1	1	3.5	96	3.3
1	0	56	0	4	---	11	0	34	3.5	9	1.0	64	0	119	0.1	2	0	97	3.3
2	0	57	0	5	1.3	12	3.5	35	0	10	0	65	3.5	120	0	3	---	98	0
3	---	58	0	IC5005		13	0	36	0	11	0	66	0.7	121	0.1	4	3.5	99	1.7

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

VOLTAGE CHART

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

PIN NO.	VOLTAGE
155	1.6
156	1.7
157	1.7
158	1.7
159	3.3
160	3.3
IC6002	
1	0
2	3.3
3	0
4	3.3
IC6003	
1	0.7
2	0.7
3	2.6
4	1.6
5	2.2
6	2.2
7	2.0
8	0.8
9	---
10	---
11	3.3
12	3.3
13	---
14	---
15	---
16	---
17	0
18	2.1
19	1.4
20	2.0
21	1.7
22	1.7
23	1.7
24	1.6
25	0.2
26	3.3
27	0
28	0.2
29	0.2
30	0.2
31	0.2
32	0.2
33	0.7
34	0.2
35	0.2
36	0.7
37	3.3
38	0.7
39	0.7
40	0.7
41	0.7
42	0.7
43	0.7

PIN NO.	VOLTAGE
44	0.7
45	0.2
46	0
47	3.3
48	0
IC6005	
1	0
2	3.0
3	0
4	3.3
IC6006	
1	3.3
2	3.3
3	0
4	---
5	3.3
IC6007	
1	3.3
2	3.3
3	0
4	3.4
5	3.4
IC6012	
1	3.3
2	---
3	0
4	3.4
5	3.3
Q1100	
E	0
C	0
B	0.7
Q1102	
E	0
C	0
B	0.7
Q1103	
E	0
C	0
B	0.7
Q1104	
1	5.1
2	5.1
3	5.1
4	0.5
5	5.1
6	5.1
7	5.1
8	5.1
Q1105	
1	9.1
2	9.1
3	9.1
4	0.9

PIN NO.	VOLTAGE
5	9.0
6	9.0
7	9.0
8	9.0
Q1106	
E	0
C	3.3
B	0.1
Q1107	
E	3.4
C	0
B	3.3
Q1108	
E	5.4
C	-1.1
B	5.3
Q1109	
E	2.7
C	0
B	2.9
Q5000	
E	0
C	3.1
B	0
Q5002	
E	2.7
C	0
B	2.0
Q5004	
E	3.1
C	0
B	2.4
Q5008	
E	3.9
C	9.0
B	4.6
Q5009	
E	2.1
C	9.0
B	2.7
Q5010	
E	2.1
C	0
B	2.7
Q5021	
E	5.3
C	0
B	4.6
Q5802	
E	0
C	0
B	0.7
Q5804	
E	0
C	0

PIN NO.	VOLTAGE
B	0.7
Q5807	
E	0
C	0
B	0
Q5818	
E	0
C	0
B	0.7
Q5819	
E	0
C	0
B	0
Q5820	
E	0
C	3.3
B	0.1
Q5821	
E	0
C	3.8
B	0
Q5823	
E	0
C	0.1
B	0.6
Q5827	
E	0
C	4.5
B	0
Q5828	
E	0
C	3.3
B	0
Q5829	
E	0
C	0
B	0.7
Q6000	
E	0
C	3.5
B	0
Q6001	
E	3.5
C	0
B	3.5
Q6002	
E	0
C	0
B	0.7
Q6003	
E	2.5
C	0
B	2.0
Q6004	

PIN NO.	VOLTAGE
E	0
C	0
B	0.7
Q6005	
E	0
C	3.2
B	0
Q6007	
E	0
C	0
B	0.7
Q6008	
E	5.1
C	0
B	2.6
Q6009	
E	0
C	3.3
B	0.2
Q6010	
E	0
C	0
B	0.7
Q6011	
E	5.1
C	5.0
B	4.4
Q6012	
E	0
C	0
B	0.7
Q6014	
E	2.7
C	5.1
B	2.3
Q6015	
E	2.0
C	5.1
B	2.7
Q6016	
E	3.3
C	3.3
B	2.7
Q6017	
E	4.6
C	5.1
B	5.2
Q6027	
E	0
C	3.3
B	0
CN3000	
1	4.5
2	4.5

PIN NO.	VOLTAGE
3	0
4	0
5	0
6	0
7	4.5
8	4.5
9	0
10	3.9
11	3.9
12	0
13	1.6
14	0
15	1.1
16	0
17	2.8
18	0
19	4.6
20	0
21	4.6
22	0
23	4.6
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	0
32	0
33	0
34	0
35	2.6
36	2.6
37	2.6
38	0
39	0
40	3.5
41	3.5
42	0
43	5.1
44	9.0
45	0
46	0
47	0
48	0
49	0
50	0
51	0
52	0
53	0
54	0
55	0
56	0
57	0

PIN NO.	VOLTAGE
58	3.0
59	3.0
60	3.4
61	3.3
62	3.3
63	2.3
64	4.9
65	5.0
CN5700	
1	0
2	1.2
3	1.6
4	0
5	1.4
6	1.3
7	0
8	1.2
9	1.5
10	0
11	1.2
12	1.6
13	0
14	1.3
15	1.5
16	0.3
17	0
18	5.1
19	5.1
20	3.3
CN6000	
1	7.1
2	2.5
3	3.0
4	5.1
5	31.4
6	16.8
7	9.1
8	9.1
9	9.1
10	0
11	0
12	0
13	0
14	0
CN6001	
1	---
2	3.2
3	3.3
4	0
5	0
6	0
7	0
8	0
9	0

PIN NO.	VOLTAGE
CN6002	
1	5.0
2	0
3	0
CN6003	
1	0
2	0
3	0
4	0
5	0
6	0
7	---
8	31.4
9	---
10	0
11	---
12	0
13	2.9
14	0
15	3.4
16	0
17	0
18	3.4
19	3.4
20	3.2
21	---
22	3.3
23	3.3
24	0
25	0
26	0
27	3.4
28	1.2
29	---
30	0.2
31	0
32	3.4
33	3.4
34	5.2
35	0
36	3.3
37	0
38	0
39	---
40	0
41	4.6
42	0
43	4.6
44	0
45	0.9
46	0
47	1.6
48	0
49	0
50	0

PIN NO.	VOLTAGE
51	9.1
52	9.1
53	9.1
54	5.1
55	0
56	0
57	5.1
58	3.9
59	0
60	3.9
61	0
62	0
63	0
64	0
65	0
66	0
67	0
68	0
69	0
70	0
71	0
72	0
73	0
74	0
75	0
76	0
77	0
78	0
79	0
80	3.3
81	0
82	0
83	0
84	0
85	1.7
86	0
87	3.3
88	1.2
89	1.1
90	1.3
91	0
92	3.4
93	0
94	0
95	0
96	0
97	0.2
98	0.3
99	1.4
100	1.5
101	0
102	1.5
103	1.4
104	1.1
105	1.8

PIN NO.	VOLTAGE
106	0.5
107	0.6
108	0
109	1.5
110	0
CN6008	
1	16.8
2	9.0
3	5.1
4	3.5
5	0
6	0
7	0
8	0
TP1100	5.1
TP1101	9.1
TP1102	5.1
TP1103	3.4
TP1104	2.6
TP1105	3.5
TP1106	0
TP1107	0
TP1108	3.5
TP1109	3.5
TP1110	5.1
TP1111	2.6
TP1112	3.5
TP1113	9.1
TP1114	9.0
TP1115	5.1
TP1116	9.0
TP1117	5.1
TP1118	3.4
TP3002	9.0
TP3003	0
TP3004	3.4
TP3005	3.3
TP3006	3.3
TP3007	0
TP3008	3.0
TP3009	3.0
TP3010	2.3
TP3011	4.9
TP3012	5.0
TP3013	0
TP3014	4.5
TP3015	1.6
TP3016	4.6
TP3017	4.6
TP3018	4.6
TP3019	1.1
TP3020	4.5
TP3021	4.5
TP3022	2.8

PIN NO.	VOLTAGE
TP3023	3.9
TP3024	3.9
TP3025	0
TP3026	4.5
TP3027	3.5
TP3028	5.1
TP5000	3.5
TP5001	2.6
TP5002	1.3
TP5003	0
TP5004	0
TP5005	0
TP5006	0
TP5007	0
TP5008	3.5
TP5009	3.5
TP5010	0
TP5700	5.1
TP5701	5.1
TP5702	0.3
TP5703	3.3
TP5800	0
TP5801	4.5
TP5802	4.5
TP5803	0
TP5804	4.5
TP5805	4.5
TP5806	4.5
TP5807	4.5
TP5808	5.4
TP5809	3.7
TP5810	3.3
TP5811	3.3
TP5812	0
TP5813	0
TP5814	4.5
TP5815	4.5
TP5816	0
TP5817	0
TP5818	0
TP5819	0
TP5820	0
TP5821	0
TP5822	4.5
TP5823	4.5
TP5824	0
TP5825	0
TP6000	0
TP6001	0
TP6002	3.3
TP6003	3.3
TP6004	0
TP6005	3.3
TP6006	3.3
TP6007	3.3

[illegible]

VOLTAGE CHART

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

BASE P.C.B.

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
IC3101		55	3.9	29	4.5	13	0	C	9.0	25	0	TP3101	2.8
1	5.5	56	3.9	30	4.5	14	---	B	4.5	26	0	TP3102	3.9
2	8.7	57	9.0	31	0	15	19.4	Q4003		27	0	TP3103	3.9
3	5.5	58	3.9	32	4.9	16	0.8	E	3.9	28	0	TP3104	1.1
4	0	59	3.9	33	4.9	17	0	C	9.0	29	0	TP3105	1.6
5	5.5	60	3.9	34	4.6	18	0	B	4.5	30	0	TP3106	4.5
6	8.7	61	3.6	35	4.6	19	4.9			31	0	TP3107	4.5
7	5.5	62	0	36	4.6	20	3.4	CN3101		32	0	TP3109	4.6
8	9.0	63	5.5	37	4.5	21	0	1	5.1	33	0	TP3110	4.6
9	5.5	64	0	38	4.5	22	3.4	2	0	34	0	TP3111	4.6
10	0	65	5.6	39	4.5	23	3.0	3	2.3	35	2.6	TP3112	0
11	5.5	66	1.9	40	4.5	24	3.0	4	0	36	2.6	TP3113	0
12	8.8	67	5.5	41	4.5	25	0	5	0	37	2.6	TP3114	0
13	5.5	68	0	42	4.5	26	1.0	6	3.3	38	0	TP3115	4.5
14	0	69	5.5	43	4.5	27	2.1	7	---	39	0	TP3116	4.5
15	5.5	70	0.1	44	4.5	28	0	8	3.3	40	3.5	TP3117	0
16	3.8	71	5.5	IC4501		29	3.4	CN3102		41	3.5	TP3118	0
17	5.5	72	0	1	1.7	30	1.4	1	0	42	0	TP4001	4.5
18	0	73	5.5	2	1.7	31	1.7	2	---	43	5.1	TP4002	4.5
19	5.5	74	0	3	3.4	32	1.7	3	8.7	44	9.0		
20	0	75	5.5	4	1.7	33	0	4	0	45	0		
21	5.5	76	0.1	5	0	34	3.4	5	0	46	0		
22	0	77	5.5	6	3.4	35	14.3	6	0	47	0		
23	5.5	78	0	7	3.4	36	19.4	7	0	48	0		
24	0	79	5.5	8	0			8	0	49	0		
25	5.5	80	0	9	1.4	Q3101		9	0	50	0		
26	0	IC4002		10	1.7	E	4.6	10	0	51	0		
27	5.5	1	4.5	11	2.1	C	0	11	0	52	0		
28	0	2	4.5	12	1.7	B	3.9	12	0	53	0		
29	5.5	3	4.5	13	3.4	Q3102		13	0	54	0		
30	0	4	4.5	14	3.4	E	4.6	CN3103		55	0		
31	5.5	5	9.0	15	0	C	0	1	4.5	56	0		
32	0	6	9.0	16	0	B	3.9	2	4.5	57	0		
33	5.5	7	4.5	IC4503		Q3103		3	0	58	3.0		
34	0	8	4.5	1	1.7	E	4.6	4	0	59	3.0		
35	5.5	9	4.5	2	1.7	C	0	5	0	60	3.4		
36	0	10	4.5	3	0	B	4.0	6	0	61	3.3		
37	5.5	11	---	4	0	Q3107		7	4.5	62	3.3		
38	0.1	12	4.5	5	---	E	0	8	4.5	63	2.3		
39	5.5	13	4.5	6	0	C	0	9	0	64	4.9		
40	0.1	14	4.5	7	0	B	1.9	10	3.9	65	5.0		
41	5.5	15	4.5	8	3.4	Q3501		11	3.9	CN4501			
42	8.7	16	4.5	IC4504		E	0	12	0	1	0		
43	5.5	17	4.5	1	---	C	-0.4	13	1.6	2	19.4		
44	0	18	4.5	2	---	B	0.3	14	0	CN4502			
45	5.0	19	4.5	3	0.8	Q3502		15	1.1	1	---		
46	5.0	20	0	4	19.4	E	0	16	0	2	1.3		
47	9.0	21	---	5	---	C	0	17	2.8	3	---		
48	3.8	22	4.1	6	0	B	-0.4	18	0	4	1.3		
49	0.1	23	4.5	7	0	Q3503		19	4.6	5	1.3		
50	3.9	24	4.5	8	19.4	E	0	20	0	6	---		
51	3.9	25	4.5	9	0.8	C	0	21	4.6	7	1.3		
52	3.9	26	4.5	10	0.8	B	-0.4	22	0				
53	9.0	27	0	11	19.4	Q4002		23	4.6	TP1204	2.6		
54	3.9	28	0	12	0	E	3.9	24	0	TP1205	3.5		

VOLTAGE CHART
PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

POWER P.C.B.

PIN NO.	VOLTAGE
IC1002	
1	12.3
2	0
3	0.9
IC1003	
1	12.3
2	0
3	0.9
IC1401	
1	6.8
2	5.8
3	-3.2
4	-1.0
IC1404	
1	1.9
2	0.7
3	0.4
4	0.5
IC1406	
1	12.7
2	12.3
3	0
4	3.3
IC1407	
1	12.7
2	12.3
3	0
4	3.3
IC1408	
1	11.7
2	0
3	16.7
IC1409	
1	-11.7
2	0
3	-19.3
IC1831	
1	2.1
2	6.0
3	0.9
4	0
5	1.8
6	0
7	9.6
8	16.3
IC1901	
1	1.2
2	0
3	0.2
4	0.1
IC1931	
1	-1.1
2	-5.4
3	-3.0
4	9.1

PIN NO.	VOLTAGE
5	210.3
6	---
7	-6.1
8	-6.1
IC1932	
1	2.5
2	0
3	5.8
IC1933	
1	---
2	3.3
3	0
4	3.3
5	5.1
IC1934	
1	---
2	3.3
3	0
4	3.3
5	5.1
IC1935	
1	3.3
2	3.3
3	0
4	3.5
5	5.1
IC1937	
1	5.1
2	13.3
3	0
Q1303	
S	202.3
D	396.2
G	205.9
Q1304	
S	0
D	202.3
G	4.6
Q1305	
1	0.6
2	5.3
3	5.3
4	0
5	0.6
6	-7.5
Q1401	
S	60.3
D	194.0
G	63.4
Q1402	
E	63.5
C	60.7
B	0.6
Q1503	

PIN NO.	VOLTAGE
S	64.9
D	64.8
G	74.0
Q1505	
S	0
D	6.4
G	0
Q1506	
E	65.1
C	74.3
B	65.0
Q1507	
E	0
C	5.6
B	0
Q1508	
S	205.8
D	202.3
G	870.2
Q1509	
S	4.5
D	0
G	-1.5
Q1510	
S	0
D	0
G	5.6
Q1601	
S	0
D	2.5
G	0.6
Q1602	
S	0
D	0
G	3.4
Q1801	
S	0
D	113.2
G	8.5
Q1802	
E	0
C	0.8
B	0
Q1803	
E	0
C	0
B	0.8
Q1804	
E	8.5
C	0
B	8.8
Q1903	
E	0
C	0
B	0.7

PIN NO.	VOLTAGE
Q1904	
S	17.6
D	17.4
G	10.5
Q1906	
S	5.1
D	5.1
G	0.5
P2	
1	9.1
2	5.4
3	0
4	13.6
5	0
6	13.9
7	6.7
8	6.7
9	5.1
10	1.3
11	5.6
12	5.1
13	0.9
CN1401	
1	0.5
2	3.5
3	8.0
4	7.7
5	0.5
6	0.5
7	0.5
8	3.0
9	11.3
10	-11.4
11	0.5
12	0.9
13	3.6
14	0.5
15	11.5
16	4.7
17	0.3
18	5.5
19	5.5
20	5.6
21	5.6
22	18.6
23	0.5
24	0.8
25	0.9
26	0.9
27	---
28	62.2
29	62.2
30	---

PIN NO.	VOLTAGE
31	31.6
32	31.6
33	---
34	31.5
35	31.5
36	---
37	0
38	0
39	---
40	80.0
41	70.2
42	66.5
CN1514	
1	7.1
2	2.5
3	3.0
4	5.1
5	31.4
6	16.8
7	9.1
8	9.1
9	9.1
10	0
11	0
12	0
13	0
14	0
CN1516	
1	0
2	19.6
CN1520	
1	3.0
2	3.0
CN1522	
1	5.0
2	0
3	0
TP1001	0
TP1002	0
TP1003	0
TP1004	0
TP1301	0
TP1302	0
TP1303	9.1
TP1304	9.1
TP1305	0
TP1306	0
TP1307	31.5
TP1308	31.5
TP1309	19.6
TP1310	19.6
TP1311	199.3
TP1312	199.3
TP1401	65.1

[illegible]

LCD DRIVE P.C.B.

PIN NO.	VOLTAGE
IC2001	
1	0
2	0
3	1.3
4	0.4
5	0.4
6	1.7
7	3.4
8	3.4
9	3.3
10	3.4
11	3.3
12	---
13	0
14	4.9
15	6.4
16	6.0
17	---
18	15.5
19	0
20	0
21	0
22	0
23	---
24	---
25	---
26	---
27	---
28	15.4
29	0
30	---
31	0
32	0
33	---
34	---
35	0
36	0
37	0
38	0
39	0
40	0
41	---
42	---
43	---
44	---
45	---
46	---
47	---
48	0
49	6.9
50	15.5
51	6.9
52	0
53	6.9
54	15.5

PIN NO.	VOLTAGE
55	6.9
56	0
57	6.9
58	15.5
59	6.8
60	0
61	4.5
62	7.1
63	7.1
64	7.1
65	9.6
66	15.5
67	0
68	---
69	---
70	1.4
71	1.3
72	1.1
73	1.1
74	0.5
75	1.3
76	0.7
77	0.8
78	1.1
79	1.4
80	3.1
IC2002	
1	0
2	0
3	1.3
4	0.4
5	0.4
6	1.7
7	3.4
8	3.4
9	3.4
10	3.4
11	3.3
12	---
13	0
14	4.9
15	6.4
16	6.0
17	---
18	15.5
19	0
20	0
21	0
22	0
23	---
24	---
25	---
26	---
27	---
28	15.5

PIN NO.	VOLTAGE
29	0
30	---
31	0
32	0
33	---
34	---
35	0
36	0
37	0
38	0
39	0
40	0
41	---
42	---
43	---
44	---
45	---
46	---
47	---
48	0
49	6.0
50	15.5
51	6.0
52	0
53	6.0
54	15.5
55	6.0
56	0
57	6.0
58	15.5
59	6.0
60	0
61	4.5
62	7.1
63	7.1
64	7.1
65	9.6
66	15.5
67	0
68	---
69	---
70	1.4
71	1.3
72	1.1
73	1.1
74	0.5
75	1.3
76	0.7
77	0.8
78	1.1
79	1.4
80	3.1
IC2003	
1	0
2	0

PIN NO.	VOLTAGE
3	1.3
4	0.4
5	0.4
6	1.7
7	3.4
8	3.4
9	3.4
10	3.4
11	3.4
12	---
13	0
14	4.9
15	6.4
16	6.0
17	---
18	15.5
19	0
20	0
21	0
22	0
23	---
24	---
25	---
26	---
27	---
28	15.4
29	0
30	---
31	0
32	0
33	---
34	---
35	0
36	0
37	0
38	0
39	0
40	0
41	---
42	---
43	---
44	---
45	---
46	---
47	---
48	0
49	6.9
50	15.5
51	6.9
52	0
53	6.9
54	15.5
55	6.9
56	0
57	6.9

PIN NO.	VOLTAGE
58	15.5
59	6.8
60	0
61	4.5
62	7.1
63	7.1
64	7.1
65	9.6
66	15.5
67	0
68	---
69	---
70	1.4
71	1.3
72	1.1
73	1.1
74	0.5
75	1.3
76	0.7
77	0.8
78	1.1
79	1.4
80	3.1
IC2004	
1	0
2	0
3	1.3
4	0.4
5	0.4
6	1.7
7	3.4
8	3.4
9	3.4
10	3.4
11	3.4
12	---
13	0
14	4.9
15	6.4
16	---
17	---
18	15.5
19	0
20	0
21	0
22	0
23	---
24	---
25	---
26	---
27	---
28	15.5
29	0
30	---
31	0

PIN NO.	VOLTAGE
32	0
33	---
34	---
35	0
36	0
37	0
38	0
39	0
40	0
41	---
42	---
43	---
44	---
45	---
46	---
47	---
48	0
49	6.9
50	15.5
51	6.9
52	0
53	6.9
54	15.5
55	6.9
56	0
57	6.9
58	15.5
59	6.9
60	0
61	4.6
62	7.1
63	7.1
64	7.1
65	9.6
66	15.5
67	0
68	---
69	---
70	1.4
71	1.3
72	1.1
73	1.1
74	0.5
75	1.3
76	0.7
77	0.8
78	1.1
79	1.4
80	3.1
IC2005	
1	0
2	0
3	1.3
4	0.4
5	0.4

VOLTAGE CHART

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
6	1.7	61	4.6	35	0	9	0	15	0.2	21	0	27	0	4	3.3	28	0	2	0
7	3.4	62	7.1	36	0	10	1.3	16	7.8	22	15.6	28	3.4	5	0	29	3.1	3	0
8	3.4	63	7.1	37	0	11	0	17	7.8	23	8.4	29	0.2	6	3.4	30	1.0	4	0
9	3.4	64	7.1	38	0	12	3.3	18	7.2	24	0	30	0	7	0	31	3.3	5	1.7
10	3.4	65	9.6	39	0	13	15.6	19	7.2	25	1.7	31	0	8	3.3	32	0.8	6	1.7
11	3.4	66	15.5	40	0	14	0	20	0.9	26	1.6	32	0	9	0	33	0.6	7	1.7
12	---	67	0	41	---	15	0.2	21	0	27	1.6	33	3.4	10	3.3	34	0.4	8	7.1
13	0	68	---	42	---	16	7.8	22	15.6	28	1.7	34	3.4	11	0	35	0.5		
14	4.9	69	---	43	---	17	7.8	23	8.4	29	1.7	35	0	12	0	36	0	Q2001	
15	6.4	70	1.4	44	---	18	7.2	24	0	30	0.9	36	0	13	3.3	37	0.6	E	0
16	---	71	1.3	45	---	19	7.2	25	1.7	31	7.1	37	0	14	3.4	38	0.5	C	15.6
17	---	72	1.1	46	---	20	0.9	26	1.7	32	7.7	38	3.4	IC2305		39	0.6	B	4.8
18	15.5	73	1.1	47	---	21	0	27	1.7	33	0.5	39	3.4	1	3.4	40	3.3	Q2002	
19	0	74	0.5	48	0	22	15.6	28	1.7	34	15.6	40	0	2	3.3	41	0.9	E	5.0
20	0	75	1.3	49	6.9	23	8.4	29	1.6	35	15.6	41	3.2	3	0	42	0.8	C	0
21	0	76	0.7	50	15.5	24	0	30	0.9	36	0	42	3.4	4	3.4	43	0.7	B	0
22	0	77	0.8	51	6.9	25	1.7	31	7.1	37	3.3	43	0	5	3.4	44	0	Q2302	
23	---	78	1.1	52	0	26	1.6	32	7.7	38	0	44	0	IC2501		45	0.5	S	3.3
24	---	79	1.4	53	6.9	27	1.6	33	0.6	39	3.3	45	3.4	1	3.4	46	0.7	D	4.9
25	---	80	3.1	54	15.5	28	1.7	34	15.6	40	3.3	46	3.4	2	0	47	0.7	G	3.4
26	---	IC2006		55	6.9	29	1.7	35	15.6	41	1.9	47	3.4	3	1.3	48	0.6	Q2303	
27	---			56	0	30	0.9	36	0	42	1.9	48	0	IC2502		49	3.3	S	3.3
28	15.5	2	0	57	6.9	31	7.1	37	3.3	43	1.7	49	0	1	5.1	50	0.7	D	5.0
29	0	3	1.3	58	15.5	32	7.7	38	0	44	3.4	50	0	2	0	51	1.0	G	3.4
30	---	4	0.4	59	6.9	33	0.5	39	3.3	45	0	51	3.3	3	1.4	52	0		
31	0	5	0.4	60	0	34	15.6	40	3.2	46	0	52	1.6	4	3.4	53	0.9	CN2001	
32	0	6	1.7	61	4.6	35	15.6	41	1.9	47	3.3	53	3.4	5	5.1	54	1.0	1	6.0
33	---	7	3.4	62	7.1	36	0	42	1.9	48	3.4	54	0	IC2504		55	0.3	2	0.2
34	---	8	3.4	63	7.1	37	3.3	43	1.7	IC2301		55	0	1	0.6	56	3.3	3	7.0
35	0	9	3.4	64	7.1	38	0	44	3.4	1	0	56	3.4	2	0.9	IC2701		4	6.9
36	0	10	3.4	65	9.6	39	3.3	45	0	2	2.3	57	3.4	3	1.6	1	3.4	5	6.9
37	0	11	3.4	66	15.5	40	3.2	46	3.3	3	0	58	3.4	4	0	2	16.1	6	6.9
38	0	12	---	67	0	41	1.9	47	0	4	3.2	59	2.5	5	0.7	3	0	7	6.9
39	0	13	0	68	---	42	1.9	48	3.4	5	3.4	60	3.0	6	3.3	4	15.6	8	6.9
40	0	14	4.9	69	---	43	1.7	IC2009		6	3.4	61	0	7	1.6	5	1.1	9	6.9
41	---	15	6.4	70	1.4	44	3.4	1	3.0	7	3.4	62	3.4	8	0	IC2702		10	6.9
42	---	16	---	71	1.3	45	0	2	3.3	8	1.6	63	1.5	9	1.3	1	3.4	11	6.9
43	---	17	---	72	1.1	46	0	3	3.2	9	1.7	64	2.0	10	1.2	2	9.0	12	6.9
44	---	18	15.5	73	1.1	47	0	4	0	10	0	IC2302		11	1.3	3	0	13	6.9
45	---	19	0	74	0.5	48	3.4	5	3.3	11	0	1	3.4	12	1.2	4	7.1	14	6.9
46	---	20	0	75	1.3	IC2008		6	1.7	12	---	2	3.4	13	3.3	5	1.4	15	6.9
47	---	21	0	76	0.7	1	3.0	7	0	13	0	3	0	14	0	IC2703		16	15.6
48	0	22	0	77	0.8	2	3.3	8	2.2	14	3.4	4	0	15	1.3	1	3.4	17	0.5
49	6.9	23	---	78	1.1	3	3.3	9	0	15	3.4	5	3.3	16	1.2	2	9.0	18	7.6
50	15.5	24	---	79	1.4	4	0	10	1.3	16	3.4	6	0	17	1.2	3	0	19	7.0
51	6.9	25	---	80	3.1	5	3.3	11	0	17	0	7	0	18	1.3	4	8.1	20	15.6
52	0	26	---	IC2007		6	1.7	12	3.3	18	3.4	8	0	19	1.3	5	1.4	21	1.6
53	6.9	27	---			7	0	13	15.6	19	3.4	IC2303		20	1.2	6	1.4	22	1.6
54	15.5	28	15.5	2	3.3	8	2.2	14	0	20	3.4	1	3.5	21	0	IC2704		23	1.6
55	6.9	29	0	3	3.2	9	0	15	0.2	21	0	2	3.4	22	0	1	3.4	24	1.6
56	0	30	---	4	0	10	1.3	16	7.8	22	0	3	0	23	3.3	2	9.0	25	0.9
57	6.9	31	0	5	3.3	11	0	17	7.8	23	1.7	24	0	24	0	4	7.1	26	0
58	15.5	32	0	6	1.7	12	3.3	18	7.2	24	0	IC2304		25	3.3	5	1.4	27	0
59	6.9	33	---	7	0	13	15.6	19	7.2	25	1.8	1	3.3	26	1.7	IC2705		28	0
60	0	34	---	8	2.2	14	0	20	0.9	26	0	2	0	27	3.3	1	2.1	29	7.2

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

VOLTAGE CHART

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

IRIS P.C.B.

PIN NO.	VOLTAGE
20	3.3
CN2701	
1	7.1
2	0.2
3	0.2
CN2702	
1	8.1
2	0
3	0.1
CN2703	
1	7.1
2	0
3	0.1
CN2704	
1	16.5
2	9.0
3	5.1
4	3.4
5	0
6	0
7	0
8	0
CN2705	
1	9.0
2	0
3	0
4	5.0
5	5.0
6	0
7	5.1
TP2001	6.0
TP2002	6.0
TP2003	6.0
TP2004	6.9
TP2005	6.9
TP2006	6.9
TP2306	3.3
TP2321	3.3
TP2322	0
TP2326	3.3
TP2327	3.2
TP2328	3.4
TP2501	3.3
TP2502	3.4
TP2503	0
TP2504	0
TP2505	1.8
TP2506	3.2
TP2507	3.4
TP2508	3.4
TP2729	0
TP2730	15.6
TP2732	3.4
TP2733	3.4

[illegible]

PIN NO.	VOLTAGE
IC9500	
1	2.5
2	2.8
3	0
4	0
5	8.9
6	0
7	8.7
8	11.8
9	9.0
10	3.8
11	3.9
12	0
13	0
14	0
15	5.1
16	9.0
17	12.9
18	0
19	0
20	1.2
21	2.5
22	2.5
23	4.9
24	9.0
IC9501	
1	2.8
2	2.9
3	2.9
4	9.0
5	2.8
6	2.8
7	5.4
8	2.8
9	2.8
10	2.7
11	0
12	2.0
13	2.1
14	1.4
IC9502	
1	5.1
2	1.5
3	0.1
4	1.2
5	0
6	0
7	0
8	0
9	1.1
10	0
11	0
12	2.6
13	0
14	4.9

PIN NO.	VOLTAGE
15	5.0
16	5.1
17	0
18	0
19	0
20	5.1
21	5.1
22	0
23	0.1
24	0
25	0
26	0
27	1.1
28	1.0
IC9504	
1	8.9
2	0
3	1.4
4	5.1
5	8.9
Q9500	
E	0
C	8.8
B	0
Q9501	
E	0
C	0
B	0.7
Q9502	
E	0
C	8.9
B	0
Q9503	
E	8.9
C	0
B	0
Q9504	
E	0
C	5.1
B	0
CN9500	
1	2.7
2	6.4
3	0
4	0
5	0
6	0
7	0
8	0
9	0
CN9501	
1	9.0
2	0

[illegible]

POWER SWITCH P.C.B.

[illegible]

VOLTAGE CHART

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

14 Printed Circuit Board

14.1. MAIN P.C.B.

**MAIN P.C.B. LSXA0774 (A, B, C) / LSXA0790 (D, E, F, G, H)
(COMPONENT SIDE)**

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

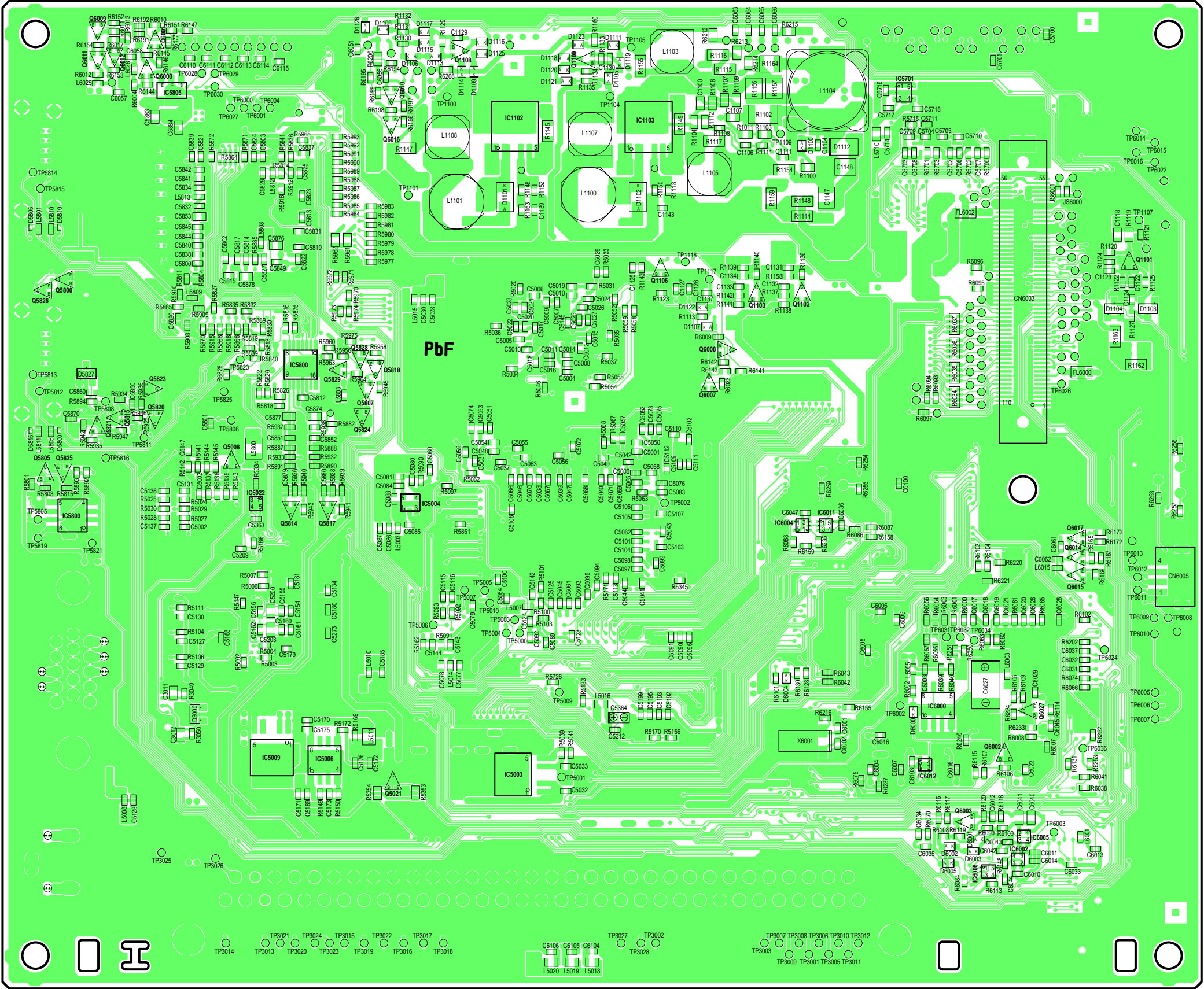
NOTE: MULTILAYER P.C.B.
THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATTERNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

COMPARISON CHART OF MODELS & MARKS	
MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

MAIN P.C.B. LSXA0774/LSXA0790
PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

MAIN P.C.B. LSXA0774 (A, B, C) / LSXA0790 (D, E, F, G, H)
(FOIL SIDE)



NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: MULTILAYER P.C.B.
THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN
FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH
SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

MAIN P.C.B. LSXA0774/LSXA0790

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K


14.2. BASE P.C.B.

BASE P.C.B. LSEP3197A (A, B, C) / LSEP3197C (D, E, F, G, H) (SUFFIX (VERSION) NUMBER①)

(COMPONENT SIDE)

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

*BASE P.C.B. SUFFIX (VERSION) NUMBER ①
REFER TO BASE P.C.B. REPLACEMENT NOTE.

COMPARISON CHART OF MODELS & MARKS	
MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

BASE P.C.B. LSEP3197A/LSEP3197C

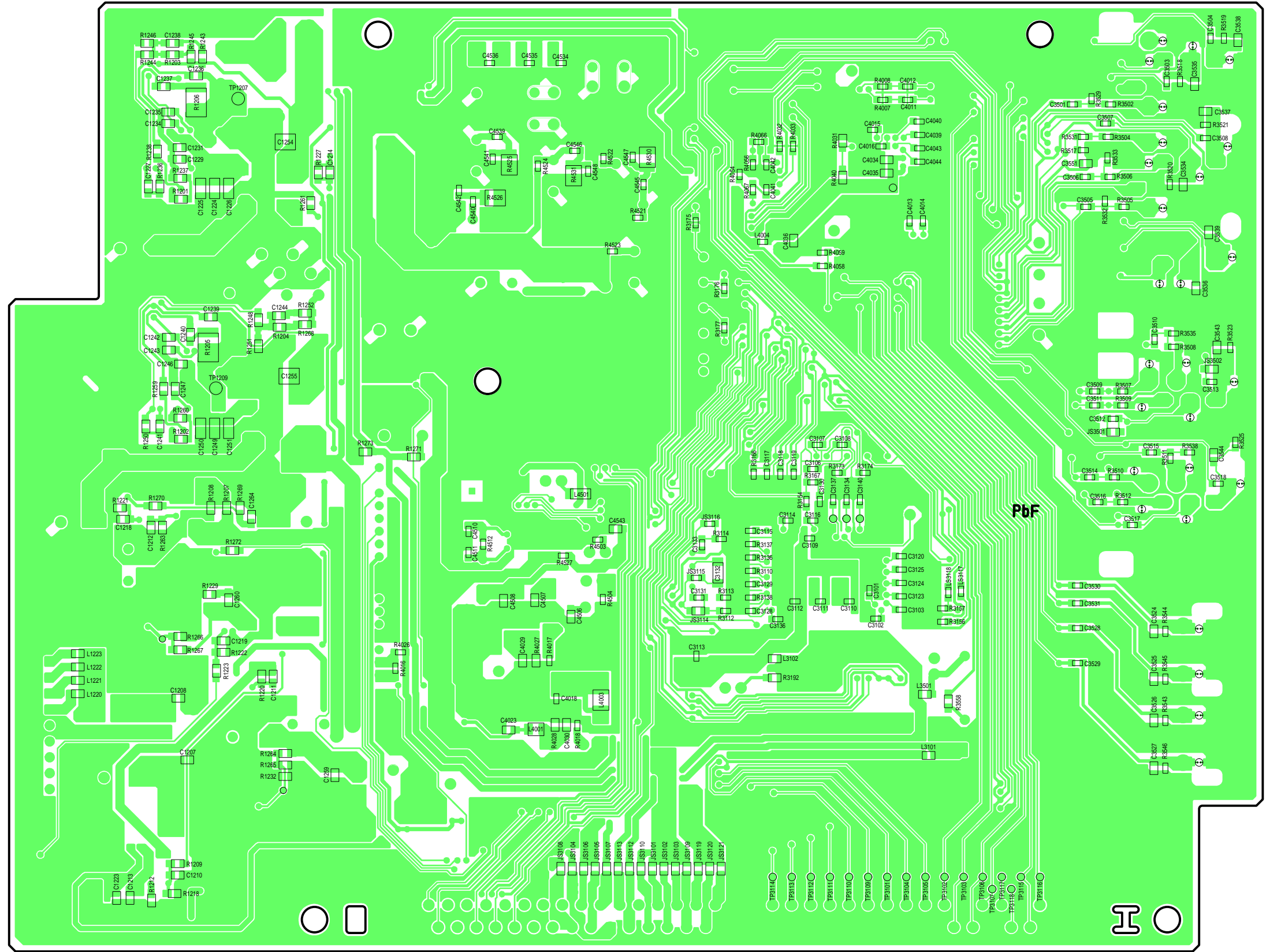
PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

(DUAL PATTERNS)

BASE P.C.B. LSEP3197A (A, B, C) / LSEP3197C (D, E, F, G, H) (SUFFIX (VERSION) NUMBER①)
(FOIL SIDE)

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.



COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

(DUAL PATTERNS)

BASE P.C.B. LSEP3197A/LSEP3197C
PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H



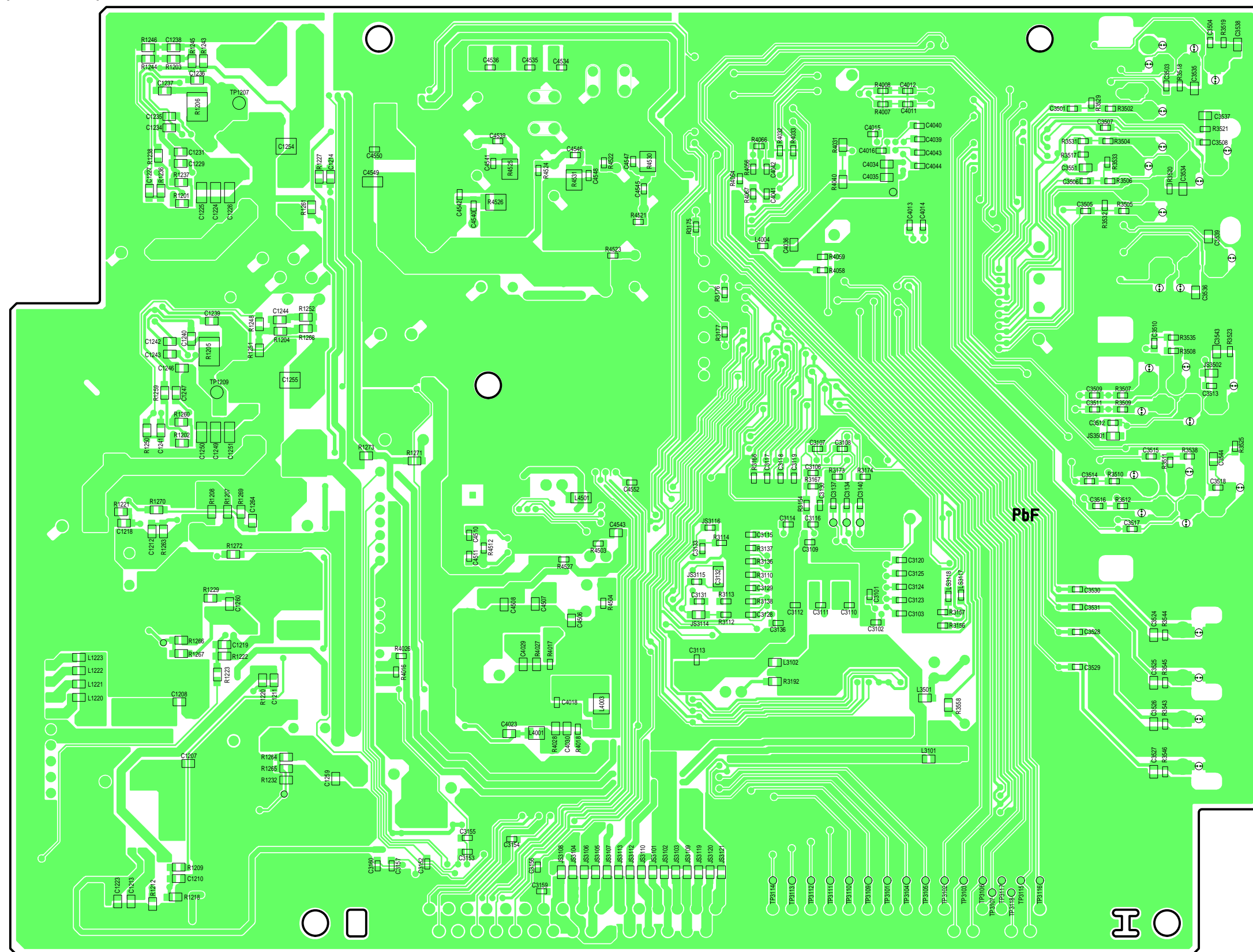
165

BASE P.C.B. LSEP3197A (A, B, C) / LSEP3197C (D, E, F, G, H) (SUFFIX (VERSION) NUMBER②)

(FOIL SIDE)

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.



COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

LSJB3197

(DUAL PATTERNS)

**BASE P.C.B. LSEP3197A/LSEP3197C
PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K**

14.3. POWER P.C.B.


POWER P.C.B. LSEP1206A1

(COMPONENT SIDE)

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

***NOTE 1:**
WHEN SERVICING POWER P.C.B., DO NOT TURN THE VARIABLE RESISTOR (R1703, R1951) ON THE POWER P.C.B.

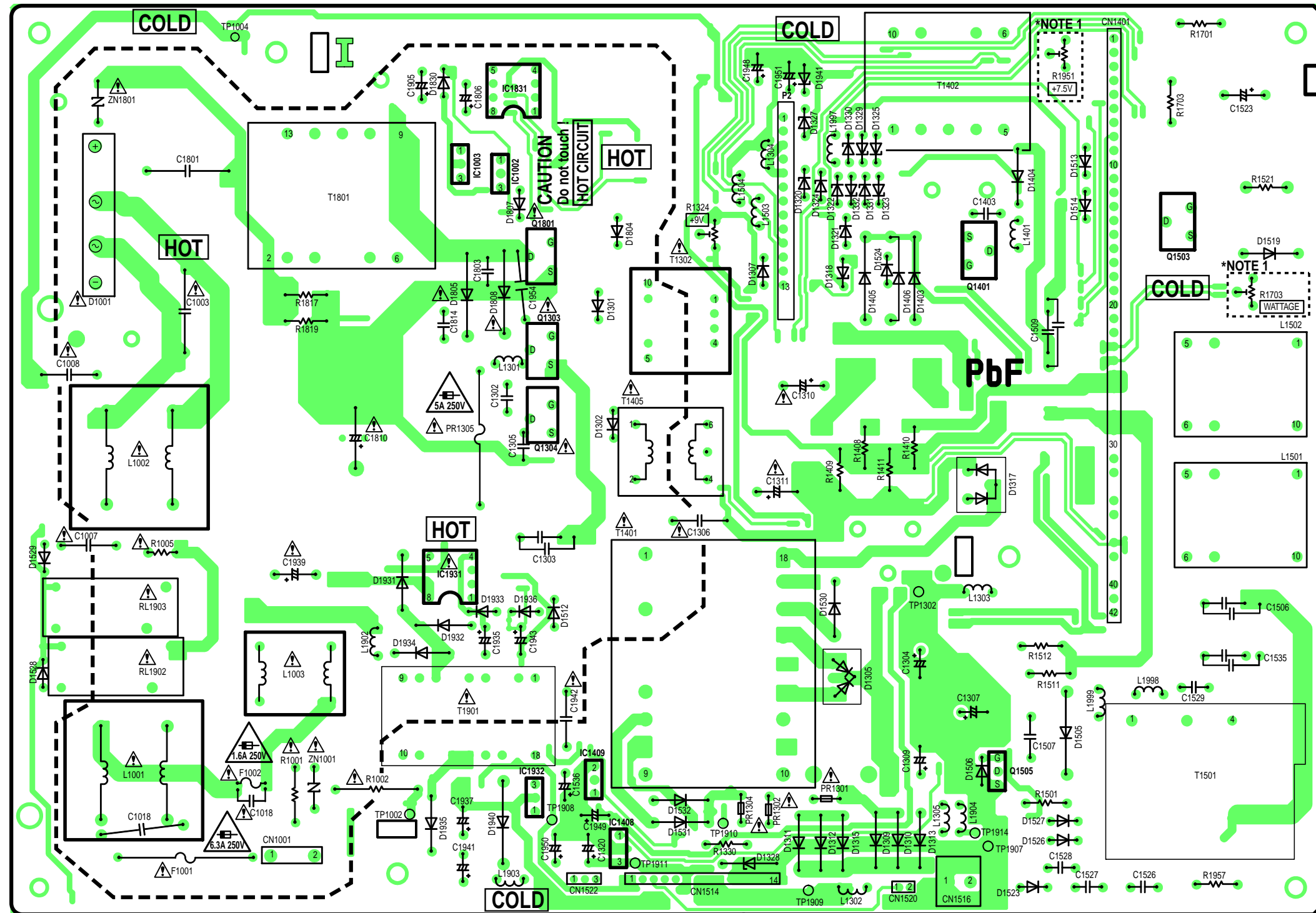
NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN  HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 6.3A 250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D'INCENDIE N'UTILISER QUE DES FUSIBLE DE MÊME
TYPE 6.3A 250V

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 5A 250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D'INCENDIE N'UTILISER QUE DES FUSIBLE DE MÊME
TYPE 5A 250V

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 1.6A 250V FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQUES
D'INCENDIE N'UTILISER QUE DES FUSIBLE DE MÊME
TYPE 1.6A 250V



HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING.

LSJB1206

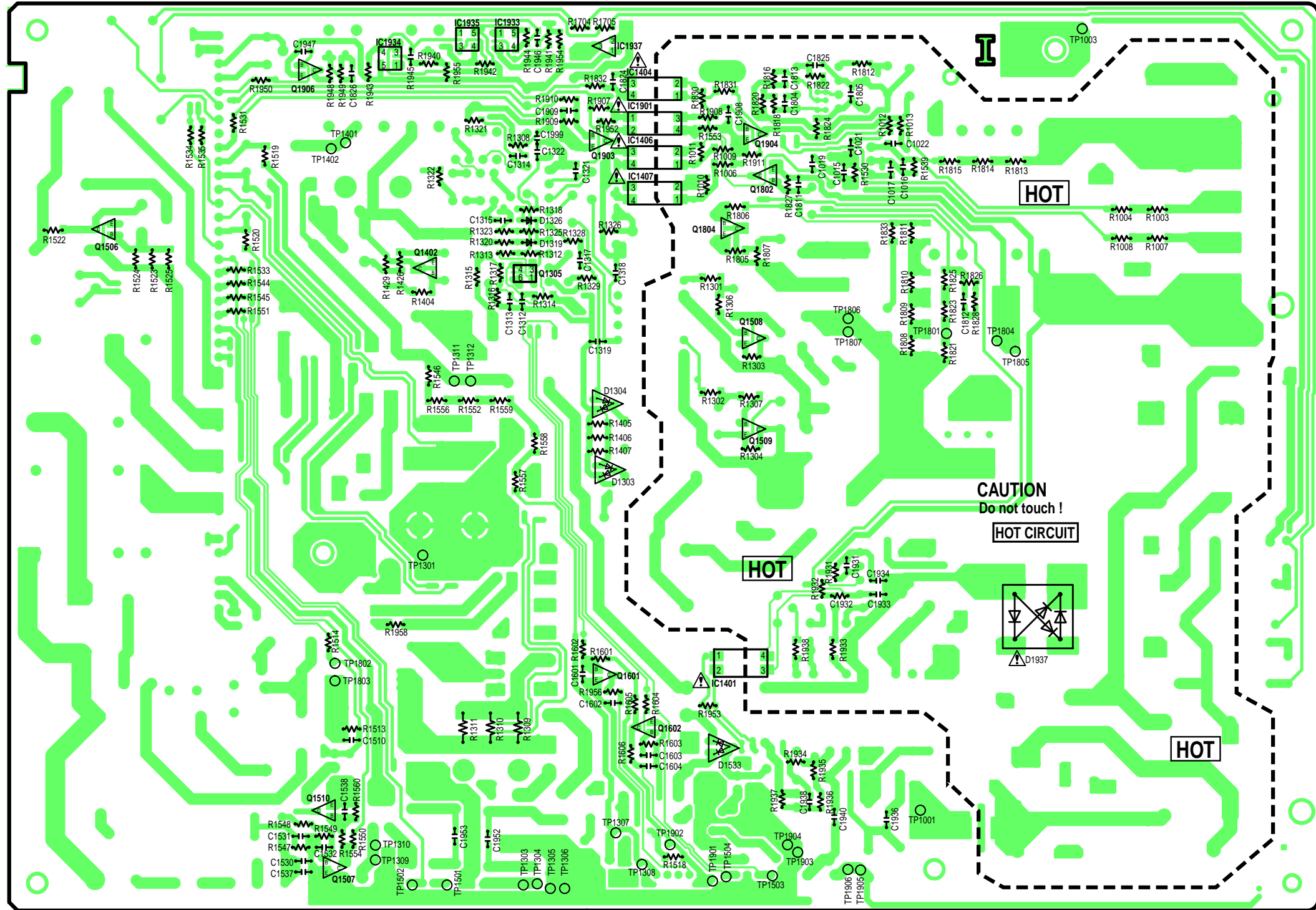
(DUAL PATTERNS)

POWER P.C.B. LSEP1206A1

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

POWER P.C.B. LSEP1206A1

(FOIL SIDE)




HOT CIRCUIT. BE CAREFUL AND USE AN ISOLATION TRANSFORMER WHEN SERVICING. LSJB1206

(DUAL PATTERNS)

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

POWER P.C.B. LSEP1206A1

**PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K**

14.4. LCD DRIVE P.C.B.

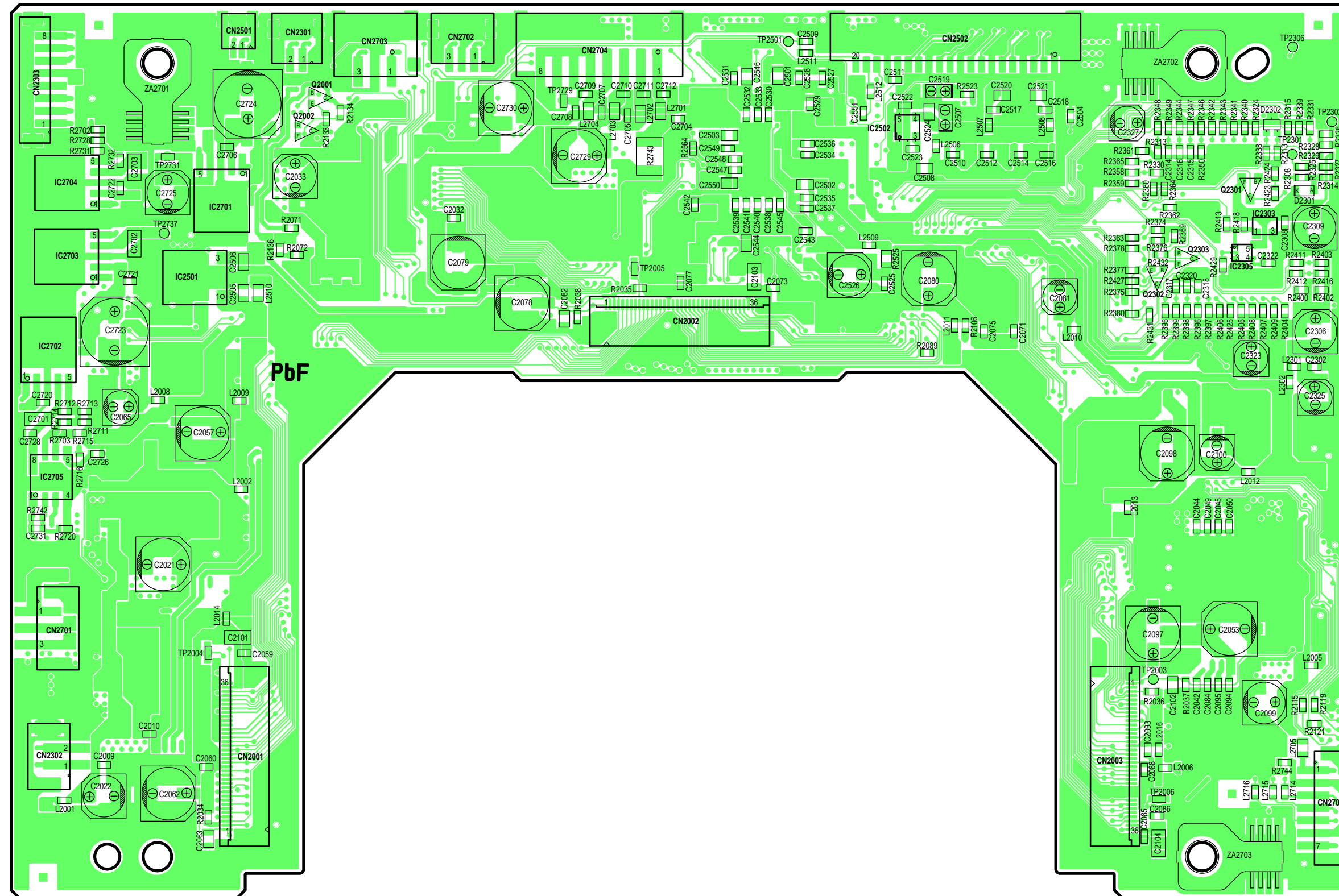
LCD DRIVE P.C.B. LSXA0772

(COMPONENT SIDE)

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

NOTE: MULTILAYER P.C.B.
THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN
FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH
SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.



LCD DRIVE P.C.B. LSXA0772

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

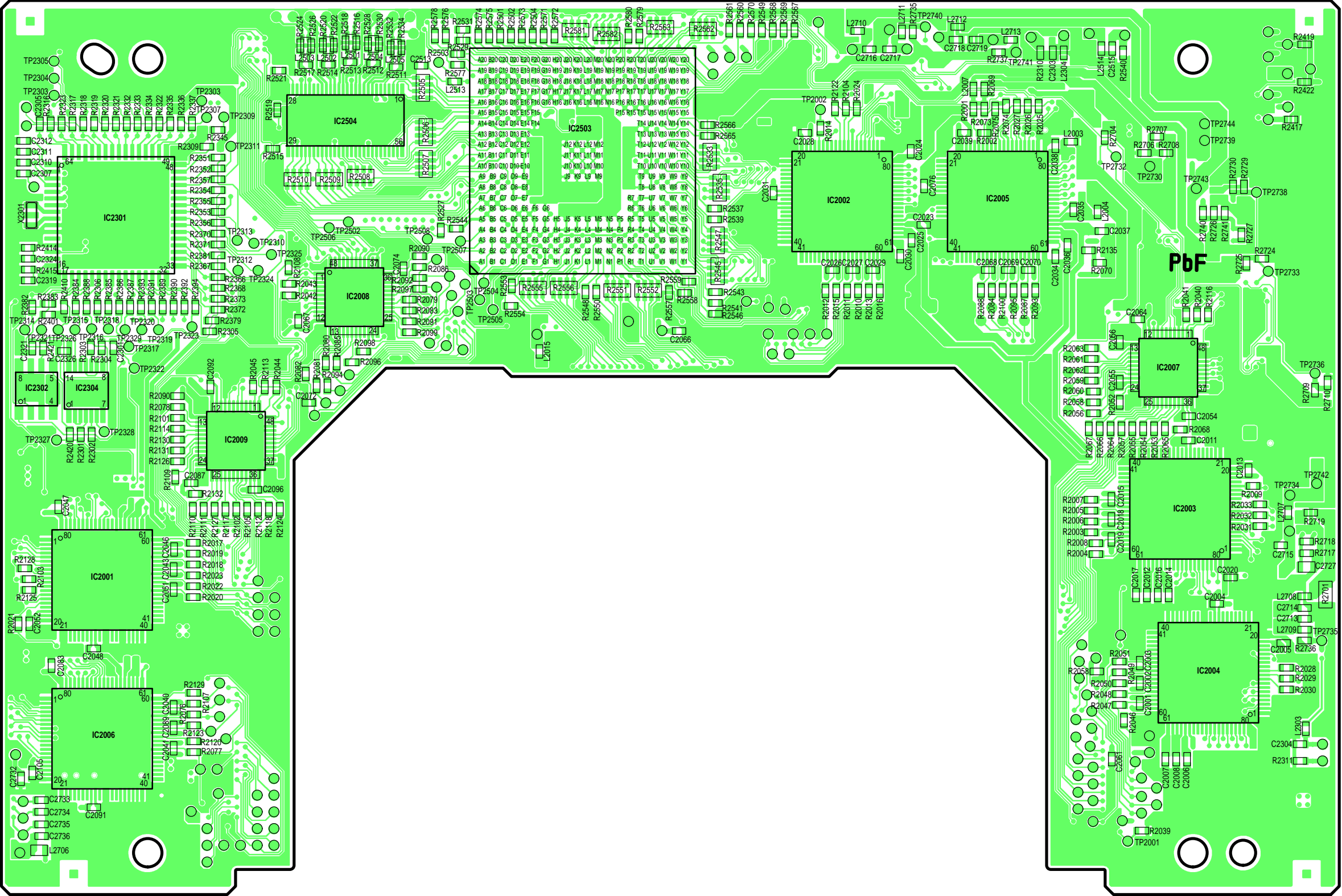
LCD DRIVE P.C.B. LSXA0772

(FOIL SIDE)

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE: MULTILAYER P.C.B.
THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN
FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH
SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

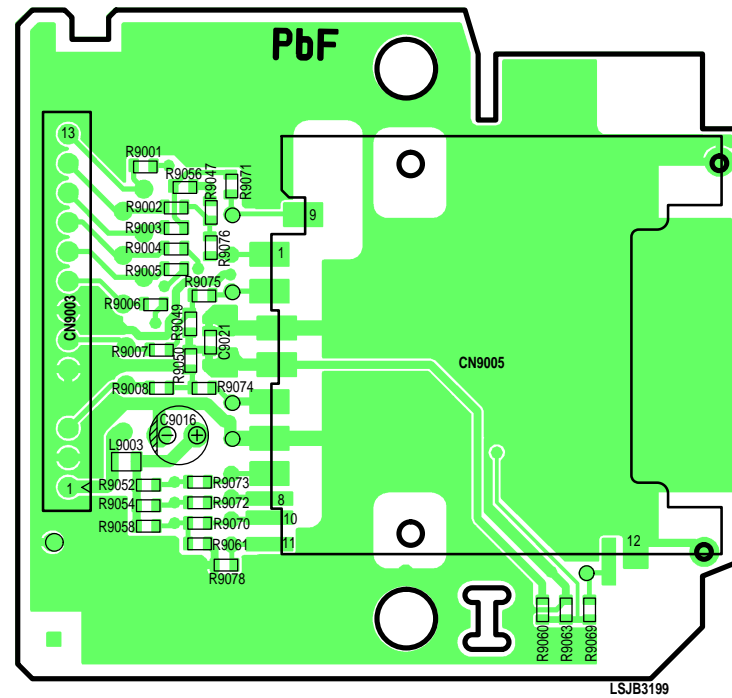


LCD DRIVE P.C.B. LSXA0772

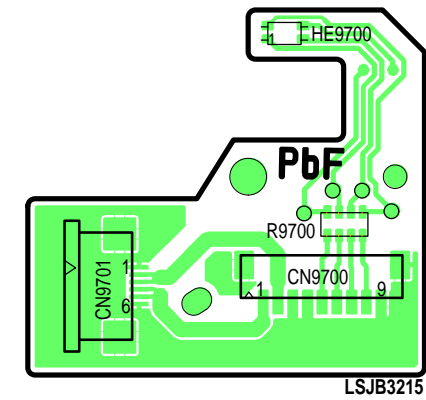
PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

14.5. SD CARD P.C.B. / IRIS P.C.B. / HALL-S P.C.B.

SD CARD P.C.B. LSEP3199A



HALL-S P.C.B. LSEP3215A

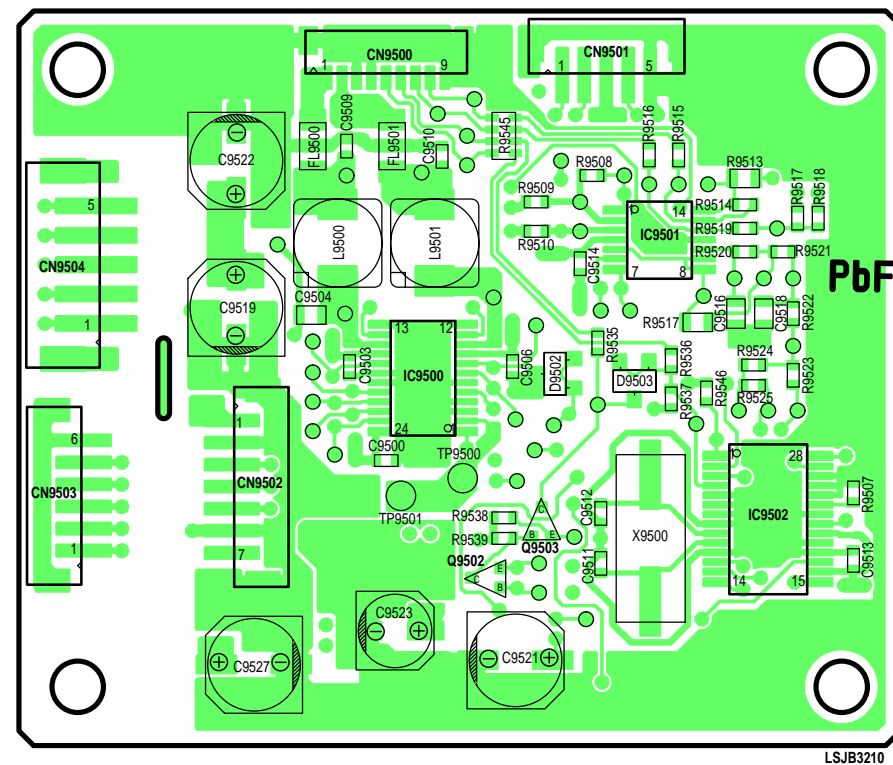


NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

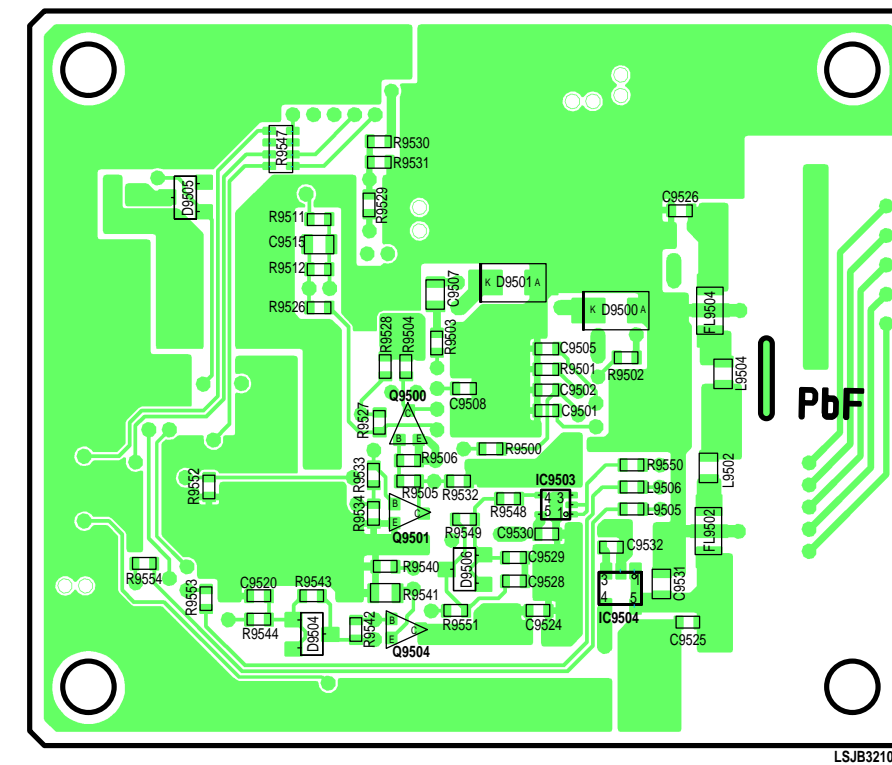
IRIS P.C.B. LSXA0773

(COMPONENT SIDE)



(DUAL PATTERNS)

(FOIL SIDE)



(DUAL PATTERNS)

SD CARD P.C.B. LSEP3199A
HALL-S P.C.B. LSEP3215A
IRIS P.C.B. LSXA0773

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

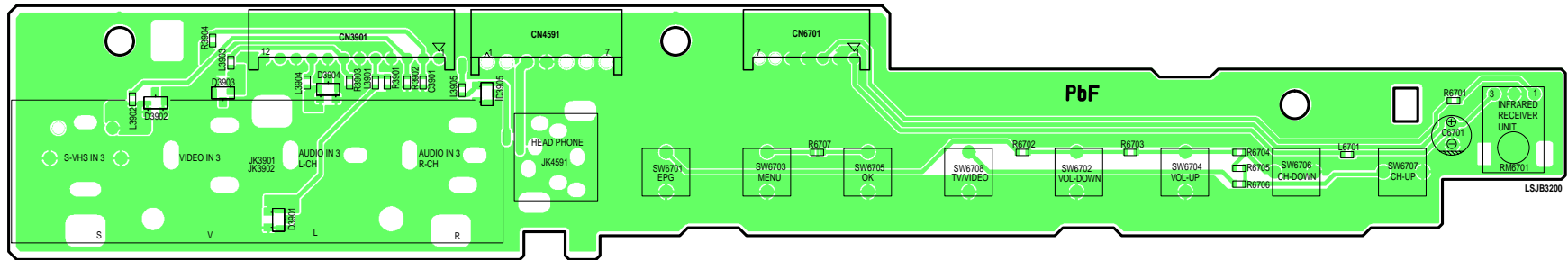
14.6. FRONT JACK / OPERATION P.C.B. / POWER SWITCH P.C.B. / THERMISTOR 2 P.C.B. / COVER SWITCH P.C.B.

NOTE:
FOR SCHEMATIC DIAGRAM AND CIRCUIT BOARD LAYOUT NOTES,
REFER TO BEGINNING OF SCHEMATIC SECTION.

NOTE:
CIRCUIT BOARD LAYOUT INCLUDES COMPONENTS WHICH ARE NOT USED.
PLEASE REFER TO THE SCHEMATIC DIAGRAM AND PARTS LIST FOR PROPER PARTS CONTENT.

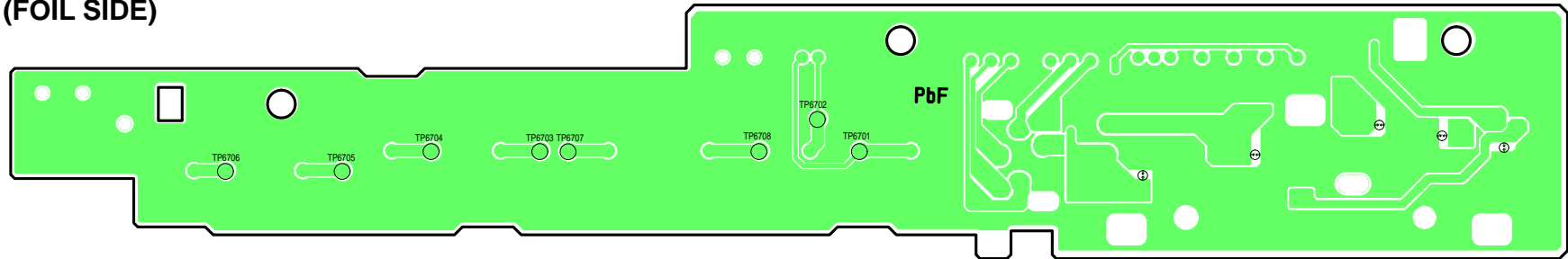
FRONT JACK / OPERATION P.C.B. LSEP3200A

(COMPONENT SIDE)



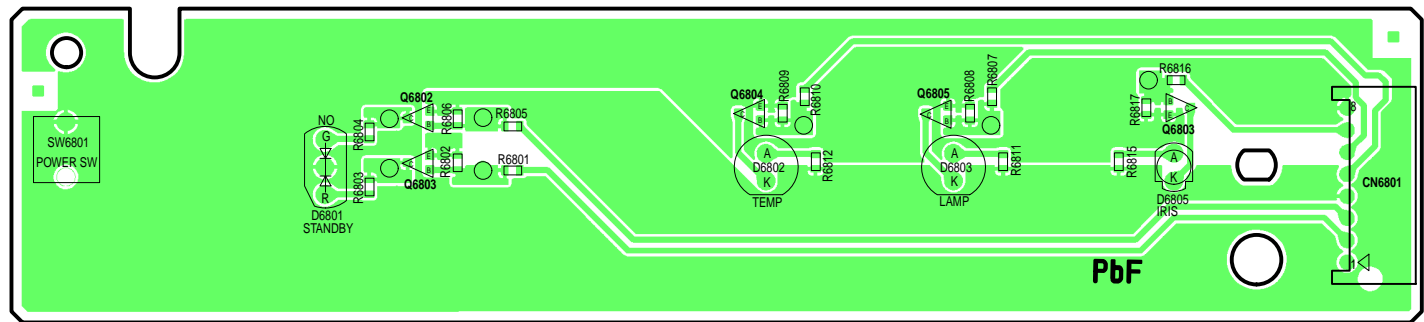
(DUAL PATTERNS)

(FOIL SIDE)

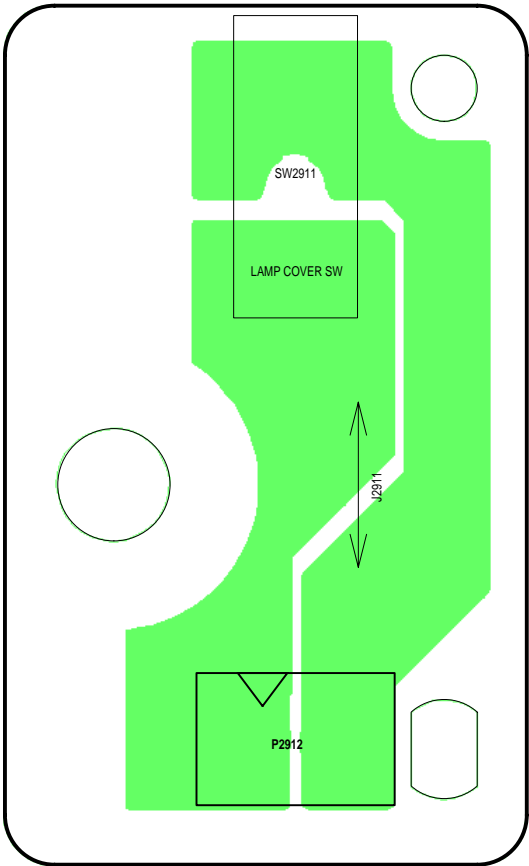


(DUAL PATTERNS)

POWER SWITCH P.C.B. LSEP3201A

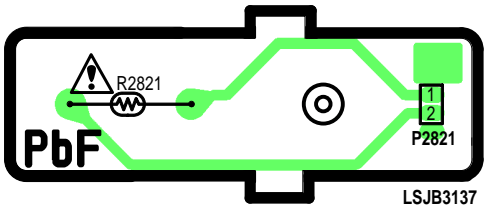


COVER SWITCH P.C.B. LSEP3160A



THERMISTOR 2 P.C.B. LSEP3137B

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE
SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,
USE ONLY THE SPECIFIED PARTS.



FRONT JACK / OPERATION P.C.B. LSEP3200A
POWER SWITCH P.C.B. LSEP3201A
THERMISTOR 2 P.C.B. LSEP3137B
COVER SWITCH P.C.B. LSEP3160A

PT-52LCX66/PT-56LCX66/PT-61LCX66/PT-52LCX16/
PT-56LCX16/PT-52LCX66-K/PT-56LCX16-K/PT-61LCX66-K

15 Appendix Information of Schematic Diagram



















15.1. CHECKING POINT TABLE OF THE CSP IC

CHECKING POINT TABLE

Check Point of IC5001

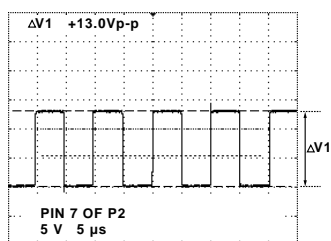
Pin	Name	Voltage	Check Point	WF No.	Remarks	Pin	Name	Voltage	Check Point	WF No.	Remarks						
P26	ROE2	0.6	Pin 7 of IC5700	WF26		V2	YIB0	1.9	R5922 (LEFT)	WF21	COMPONENT SIDE						
N25	ROE3	0.4	Pin 6 of IC5700			V1	YIB1	2.0									
N26	ROE4	0.9	Pin 4 of IC5700														
M24	ROE5	0.4	Pin 3 of IC5700			W4	YIB2	2.0	R5921 (LEFT)		COMPONENT SIDE						
M25	ROE6	1.2	Pin 2 of IC5700			W3	YIB3	2.7									
M26	ROE7	0.7	Pin 56 of IC5700			W2	YIB4	2.2									
L23	ROE8	1.3	Pin 55 of IC5700			W1	YIB5	2.2	R5920 (LEFT)		COMPONENT SIDE						
L24	ROE9	1.3	Pin 54 of IC5700			Y4	YIB6	1.3									
K24	GOE2	0.6	Pin 18 of IC5700			Y3	YIB7	1.0									
K25	GOE3	0.4	Pin 16 of IC5700	WF27	COMPONENT SIDE	Y2	YIB8	1.2	R5922 (LEFT)	WF22	COMPONENT SIDE						
K26	GOE4	0.8	Pin 15 of IC5700			Y1	YIB9	0.8									
J25	GOE5	0.9	Pin 14 of IC5700			R2	UVIB0	1.8									
J26	GOE6	0.9	Pin 12 of IC5700			R1	UVIB1	0.6	R5923 (LEFT)		COMPONENT SIDE						
H23	GOE7	1.0	Pin 11 of IC5700														
H24	GOE8	1.3	Pin 10 of IC5700			T2	UVIB2	0.7									
H25	GOE9	1.3	Pin 8 of IC5700			T1	UVIB3	0.7	R5924 (LEFT)		COMPONENT SIDE						
G24	BOE2	1.1	Pin 28 of IC5700			U4	UVIB4	0.6									
G25	BOE3	0.9	Pin 27 of IC5700			U3	UVIB5	0.6									
G26	BOE4	1.0	Pin 25 of IC5700	WF28		U2	UVIB6	0.6	R5017 (LEFT)	WF17	COMPONENT SIDE						
F24	BOE5	0.9	Pin 24 of IC5700			U1	UVIB7	0.5									
F25	BOE6	1.0	Pin 23 of IC5700			V4	UVIB8	0.6									
F26	BOE7	1.2	Pin 22 of IC5700			V3	UVIB9	0.7	R5018 (UPPER)		WF16	COMPONENT SIDE					
E24	BOE8	1.3	Pin 20 of IC5700			N2	HSIA	3.5									
E25	BOE9	1.3	Pin 19 of IC5700			N1	VSIA	0.3									
M2	GYIA0	0	R5016 (LEFT)			COMPONENT SIDE	G1	CLKIA	1.1			R5010 (LOWER)	WF18	COMPONENT SIDE			
M1	GYIA1	1.1															
N4	GYIA2	0															
N3	GYIA3	0	R5019 (UPPER)	COMPONENT SIDE	H3		CLKOA	1.0	R5043 (LEFT)	WF19		COMPONENT SIDE					
P4	GYIA4	0.9															
P3	GYIA5	1.1															
P2	GYIA6	2.0	R5008 (LOWER)		COMPONENT SIDE		AA2	HSIB	0.1		R5929 (LEFT)	WF24		COMPONENT SIDE			
P1	GYIA7	2.2															
G3	BUIA0	0.1															
G2	BUIA1	0.1	R5009 (LOWER)			COMPONENT SIDE	B23	VSIB	0.1		R5931 (LEFT)		WF23	COMPONENT SIDE			
K4	BUIA2	0.1															
K3	BUIA3	0.1															
K2	BUIA4	0.1	R5012 (LOWER)	COMPONENT SIDE			B20	HSIC	3.1	R6094 (UPPER)	WF45			FOIL SIDE			
K1	BUIA5	0.7	R5013 (LEFT)		COMPONENT SIDE		A20	VSIC	3.3	R6093 (UPPER)		WF46		FOIL SIDE			
L2	BUIA6	1.7															
L1	BUIA7	0															
H2	RVIA0	0.1	R5011 (LOWER)			COMPONENT SIDE	D25	HSOE	3.4	R5128 (UPPER)			WF47	COMPONENT SIDE			
H1	RVIA1	0															
J3	RVIA2	0.5															
J2	RVIA3	0.6	R5012 (LOWER)	COMPONENT SIDE			D26	VSOE	3.5	R5129 (UPPER)	WF48			COMPONENT SIDE			
J1	RVIA4	0.7															
L3	RVIA5	0.7	R5013 (LEFT)		COMPONENT SIDE		C11	PADDVDD	3.5	L5007 (RIGHT)		WF15		FOIL SIDE			
M4	RVIA6	1.7	R5014 (LEFT)			COMPONENT SIDE	AC8		VDD25	2.6			L5005 (LEFT)	COMPONENT SIDE			
M3	RVIA7	1.8					R5015 (LEFT)	R5004 (LOWER)							VDD	1.3	L5006 (RIGHT)
			R5016 (LEFT)	COMPONENT SIDE			A10		VDDW	3.5	L5004 (LOWER)		COMPONENT SIDE				
			R5017 (LEFT)		COMPONENT SIDE		A12		VDD	1.3	L5006 (RIGHT)	COMPONENT SIDE					
			R5018 (UPPER)			COMPONENT SIDE	B26		VDDW	3.5	L5004 (LOWER)			COMPONENT SIDE			
			R5019 (UPPER)	COMPONENT SIDE			AA3	VDDP	1.3	R5090 (LOWER)	WF17		COMPONENT SIDE				
			R5020 (UPPER)		COMPONENT SIDE		AC25	VDD_DLL0	1.2	R5063 (RIGHT)		WF18	COMPONENT SIDE				
			R5021 (UPPER)			COMPONENT SIDE	AB2	VDD_DLL1	1.3	R5062 (LEFT)			WF19	COMPONENT SIDE			

Check Point of IC2503

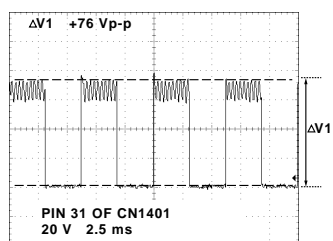
Pin	Name	Voltage	Check Point	WF No.	Remarks	Pin	Name	Voltage	Check Point	WF No.	Remarks		
B10	RIN2	0.4	R2509 (LOWER) 	WF30	FOIL SIDE	W8	G1OUT3	0.4	R2547 (LEFT) 		FOIL SIDE		
C10	RIN3	1.5				Y8	G1OUT2	0.7					
A9	RIN4	0.2				V9	G1OUT1	0.7					
B9	RIN5	0.3				W9	G1OUT0	0.9					
C9	RIN6	0.3	R2510 (LOWER) 	WF30	FOIL SIDE	Y9	G2OUT9	1.0	R2539 (LEFT) R2537 (LEFT)	WF35	FOIL SIDE		
A8	RIN7	0.7				V10	G2OUT8	0.6			FOIL SIDE		
B8	RIN8	0.6				W10	G2OUT7	0.6	R2535 (LEFT) 		FOIL SIDE		
C8	RIN9	0.9				Y10	G2OUT6	0.9					
A13	GIN2	0.4	R2507 (RIGHT) 	WF31	FOIL SIDE	V11	G2OUT5	0.5	R2533 (LEFT) 		FOIL SIDE		
B13	GIN3	1.5				W11	G2OUT4	0.6					
C13	GIN4	0.3				Y11	G2OUT3	0.4					
A12	GIN5	0.3				V12	G2OUT2	0.7					
B12	GIN6	0.3	R2508 (LOWER) 	WF31	FOIL SIDE	W12	G2OUT1	0.7	R2560 (LOWER) R2561 (LOWER)		FOIL SIDE		
C12	GIN7	0.8				Y12	G2OUT0	0.9					
A11	GIN8	0.5				V19	B1OUT9	1.1					
B11	GIN9	0.9				V20	B1OUT8	0.7					
B17	BIN2	0.5	R2505 (RIGHT) 	WF32	FOIL SIDE	U18	B1OUT7	0.6	R2562 (LOWER) 		FOIL SIDE		
C17	BIN3	1.5				U19	B1OUT6	1.1					
A16	BIN4	0.4				U20	B1OUT5	1.1					
B16	BIN5	0.4				T18	B1OUT4	0.8					
C16	BIN6	0.4	R2506 (RIGHT) 	WF32	FOIL SIDE	T19	B1OUT3	0.7	R2563 (LOWER) 		FOIL SIDE		
A15	BIN7	0.8				T20	B1OUT2	0.5					
B15	BIN8	0.7				R18	B1OUT1	0.6					
C15	BIN9	0.9				R19	B1OUT0	1.0					
J3	R1OUT9	1.0	R2554 (LEFT)	WF33	FOIL SIDE	R20	B2OUT9	1.2	R2579 (LOWER)	WF37	FOIL SIDE		
J2	R1OUT8	0.8	R2553 (UPPER)		FOIL SIDE	P19	B2OUT8	0.7	R2580 (LOWER)		FOIL SIDE		
J1	R1OUT7	0.4	R2555 (UPPER) 		FOIL SIDE	P20	B2OUT7	0.6	R2582 (LOWER) 		FOIL SIDE		
K3	R1OUT6	0.9			FOIL SIDE	N18	B2OUT6	1.1					
K2	R1OUT5	1.1			FOIL SIDE	N19	B2OUT5	1.1					
K1	R1OUT4	0.6			FOIL SIDE	N20	B2OUT4	0.8					
L3	R1OUT3	0.5	R2556 (UPPER) 		FOIL SIDE	M18	B2OUT3	0.7	R2581 (LOWER) 		FOIL SIDE		
L2	R1OUT2	0.5			FOIL SIDE	M19	B2OUT2	0.5					
L1	R1OUT1	0.8			FOIL SIDE	M20	B2OUT1	0.6					
M3	R1OUT0	0.7			FOIL SIDE	L18	B2OUT0	1.0					
M2	R2OUT9	1.0	R2550 (UPPER)		FOIL SIDE	R1	SHCLKR	4.8	R2557 (UPPER)	WF49	FOIL SIDE		
M1	R2OUT8	0.8	R2548 (UPPER)		FOIL SIDE	V13	SHCLKG	4.8	R2564 (UPPER)	WF50	COMPONENT SIDE		
N3	R2OUT7	0.4	R2551 (UPPER) 		FOIL SIDE	L19	SHCLKB	5.0	R2571 (LOWER)	WF51	FOIL SIDE		
N2	R2OUT6	0.9			FOIL SIDE	E1	DCLK	3.2	TP2505	WF52	FOIL SIDE		
N1	R2OUT5	1.1			FOIL SIDE	A2	VSYNC	3.4	TP2502	WF53	FOIL SIDE		
P3	R2OUT4	0.8			FOIL SIDE	A1	HSYNC	3.1	TP2506	WF54	FOIL SIDE		
P2	R2OUT3	0.4	R2552 (UPPER) 		FOIL SIDE	E20	RESET	3.3	R2529 (RIGHT)	—	FOIL SIDE		
P1	R2OUT2	0.5			FOIL SIDE	D7	VDD1	1.3	Pin 3 of IC2501	—	COMPONENT SIDE		
R3	R2OUT1	0.8											
R2	R2OUT0	0.7											
V6	G1OUT9	1.0	R2541 (LEFT)	WF35	FOIL SIDE	etc.							
W6	G1OUT8	0.6	R2543 (LEFT)		FOIL SIDE								
Y6	G1OUT7	0.6	R2545 (LEFT) 		FOIL SIDE								
W7	G1OUT6	0.9											
Y7	G1OUT5	0.5											
V8	G1OUT4	0.6											

15.2. WAVEFORM TABLE

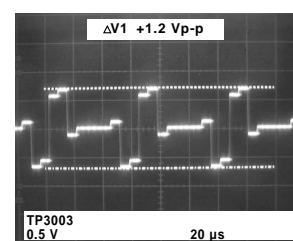
WAVEFORM TABLE



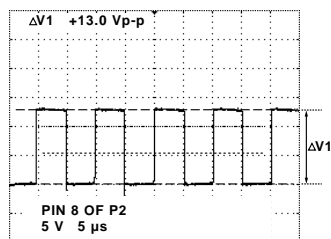
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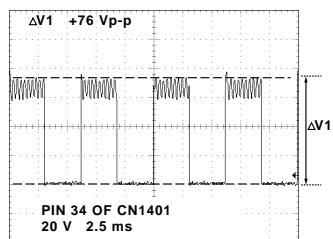
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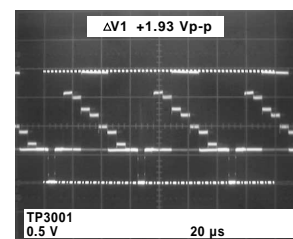
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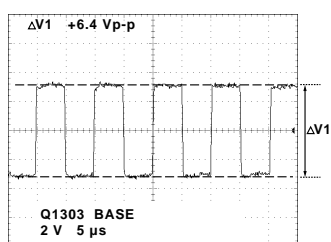
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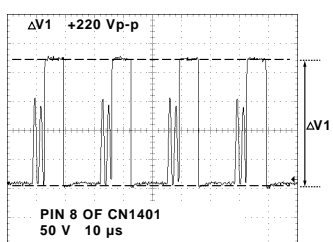
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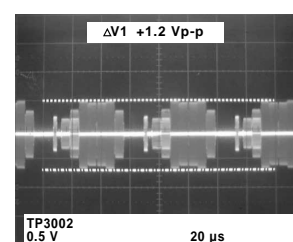
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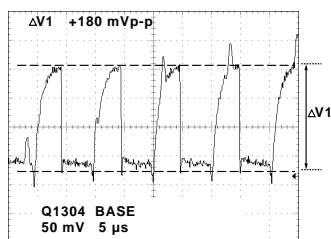
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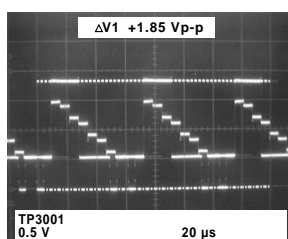
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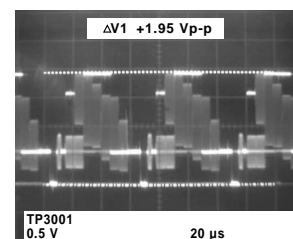
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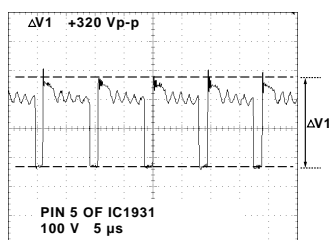
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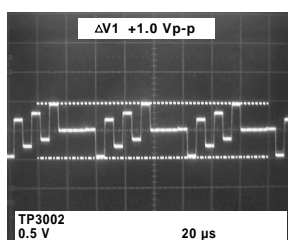
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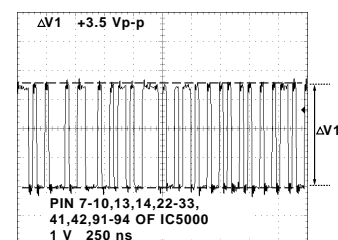
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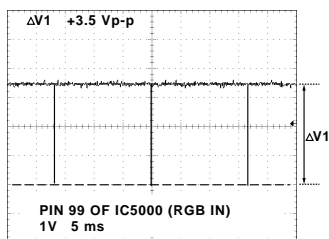
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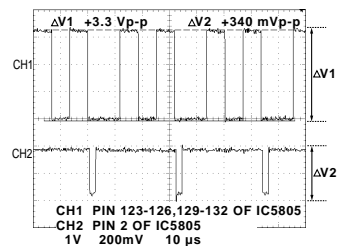
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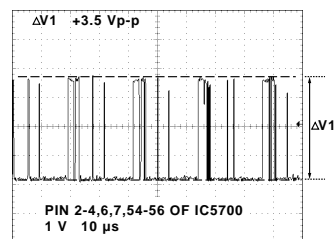
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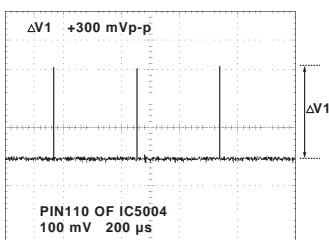
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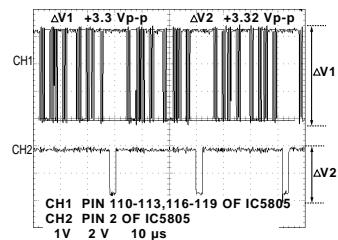
CH1 WF21
CH2 WF24



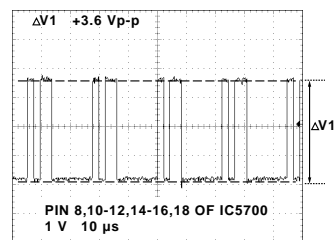
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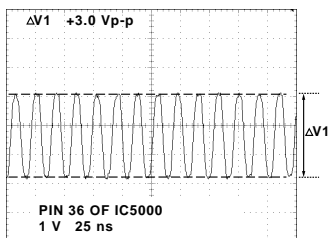
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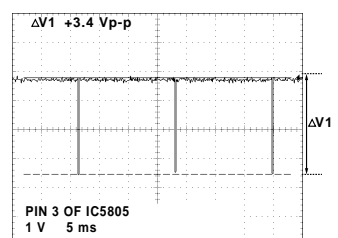
CH1 WF22
CH2 WF24



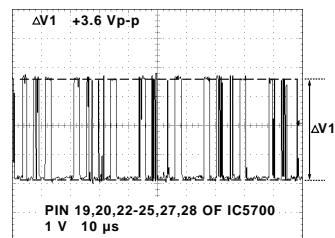
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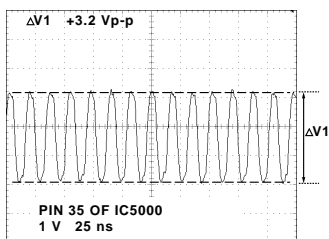
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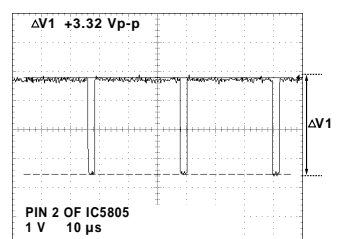
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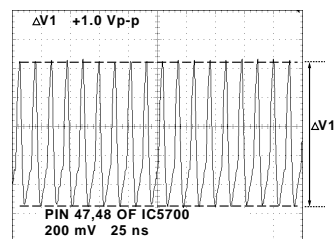
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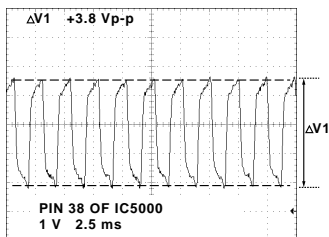
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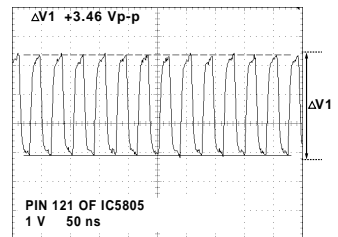
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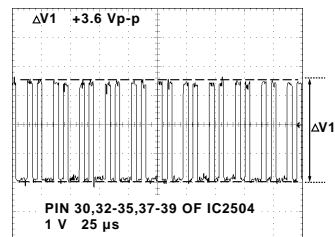
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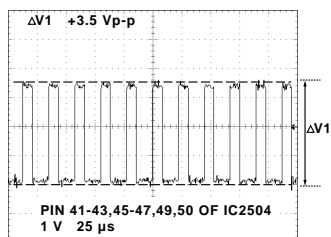
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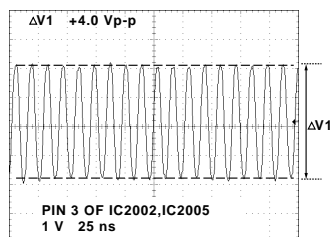
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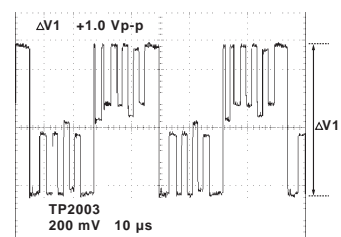
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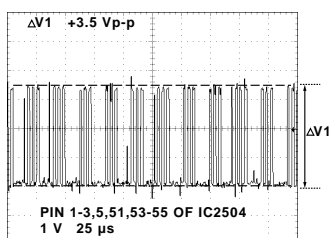
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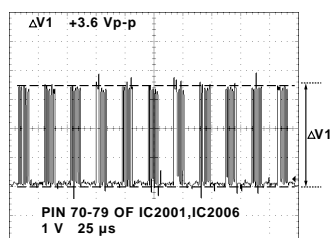
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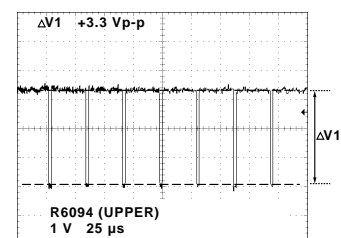
WF44



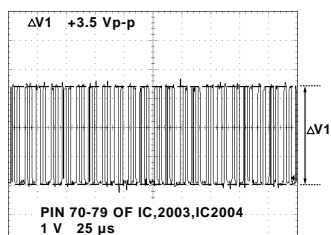
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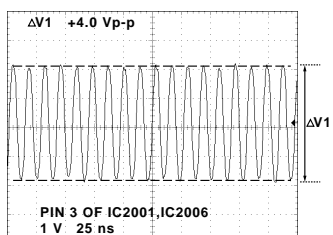
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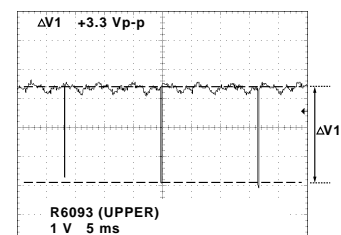
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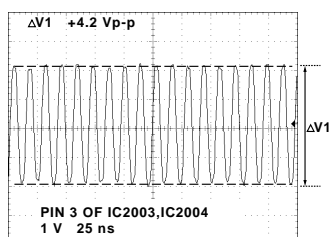
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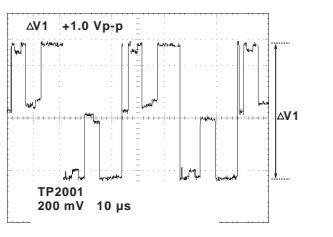
WF38



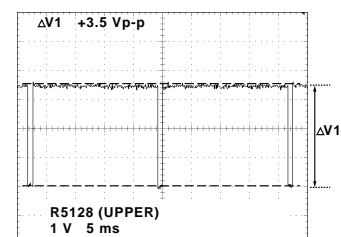
WF46



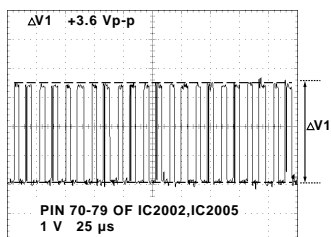
WF34



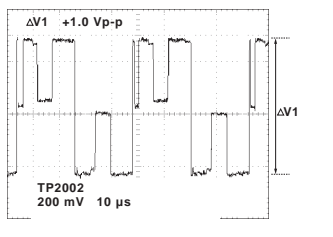
WF42



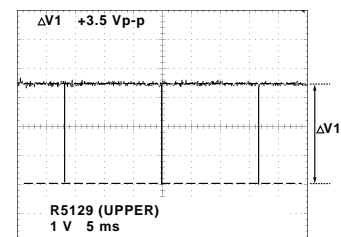
WF47



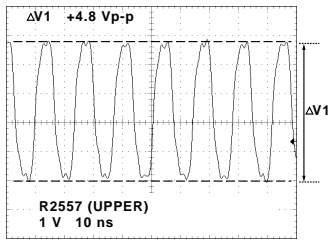
WF35



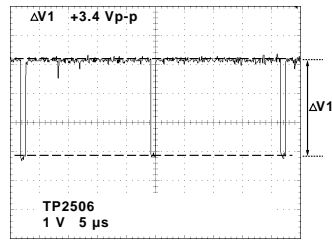
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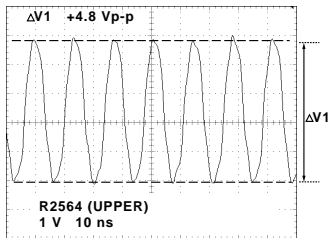
WF48



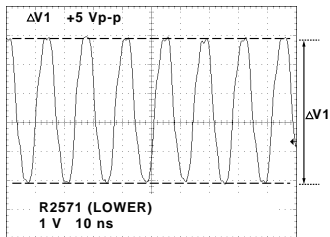
WF49



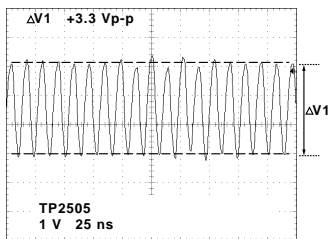
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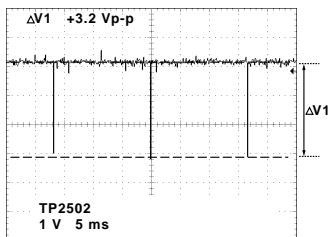
WF50



WF51



WF52



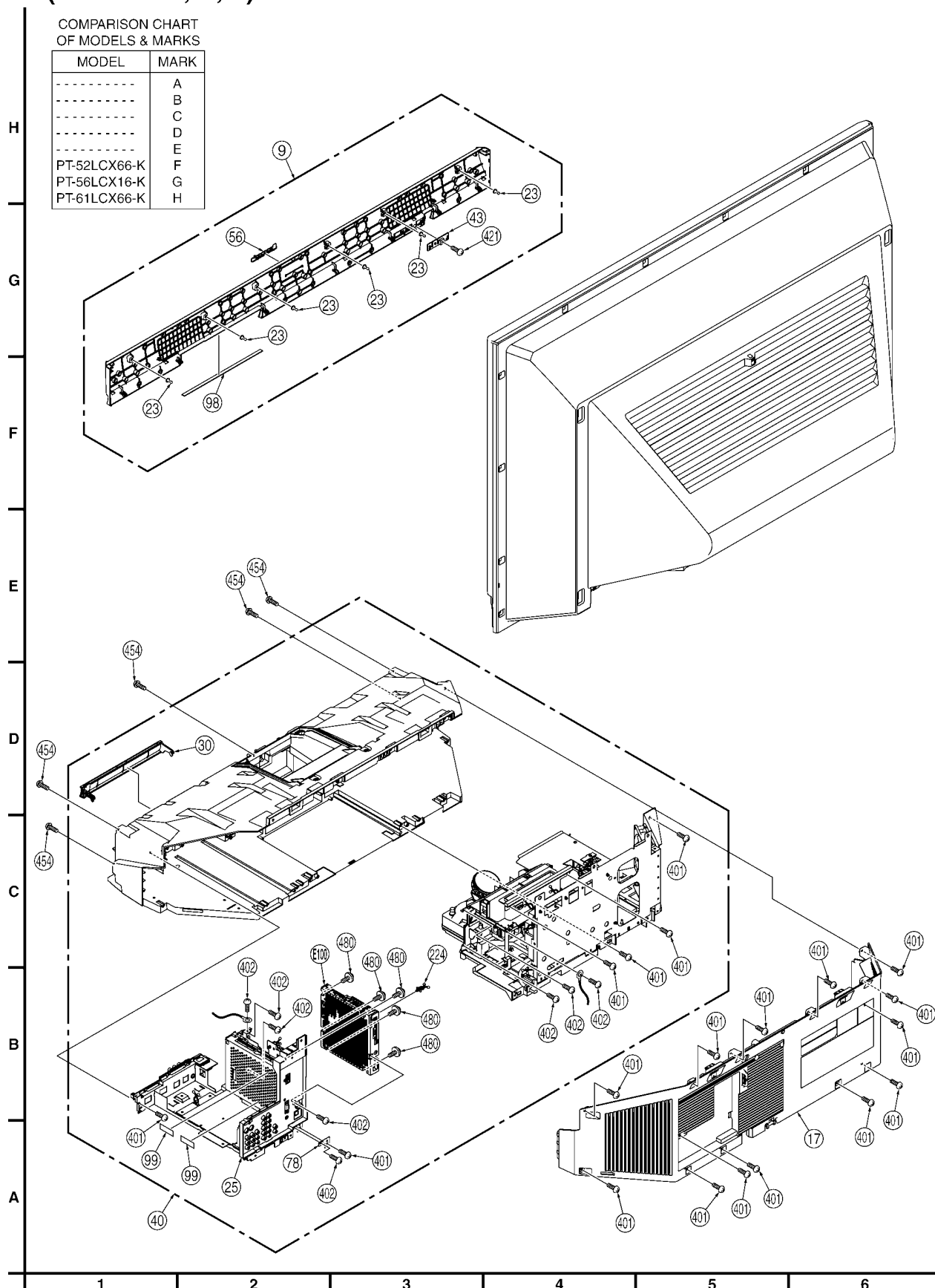
WF53

16 Exploded Views (Cabinet Section)

16.1. MAIN PARTS SECTION

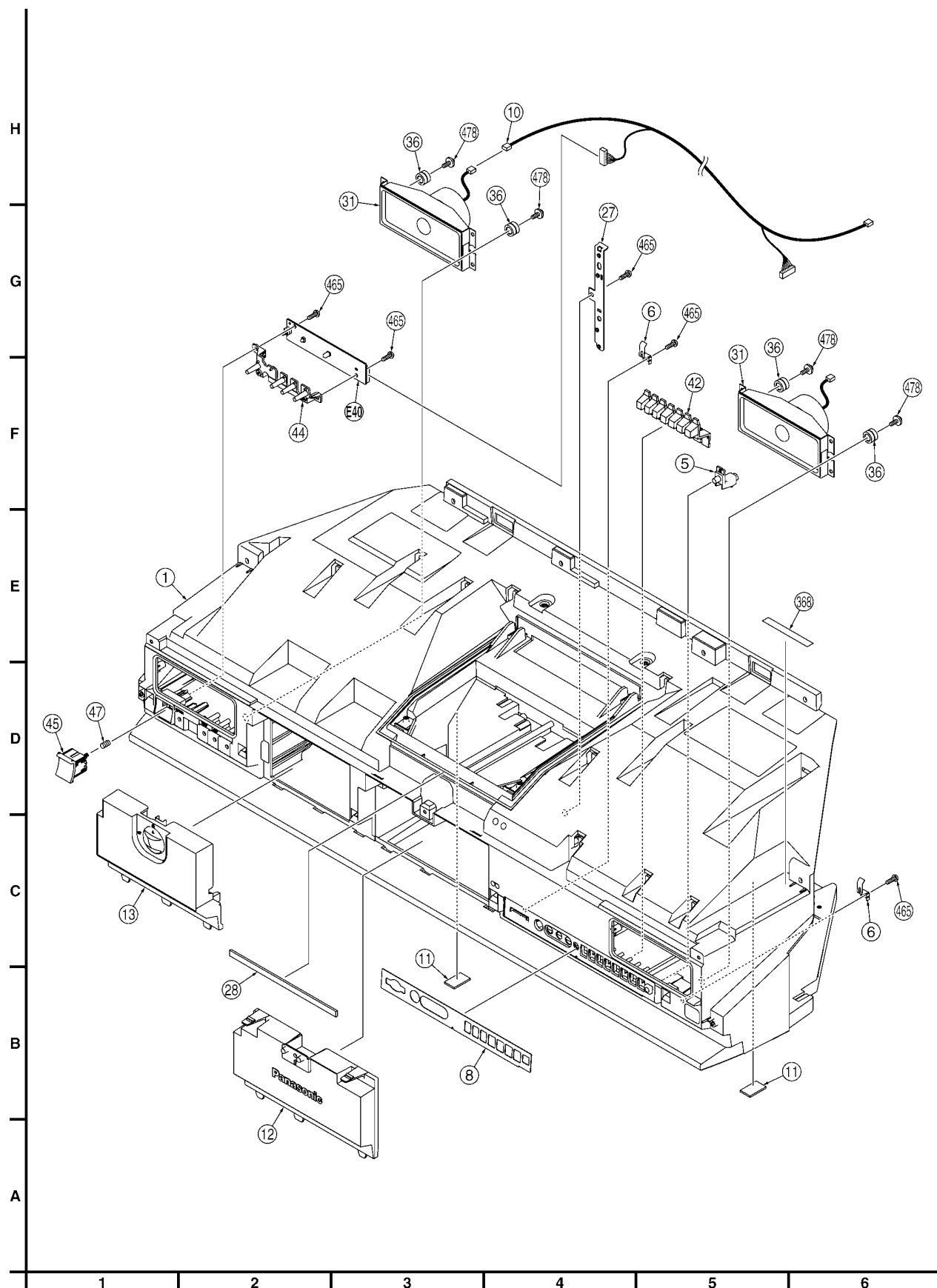
1 52 INCH MAIN PARTS SECTION (Models: A, D, F)

Note: Parts with no Ref. No. in "EXPLODED VIEW" are not supplied.
And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.



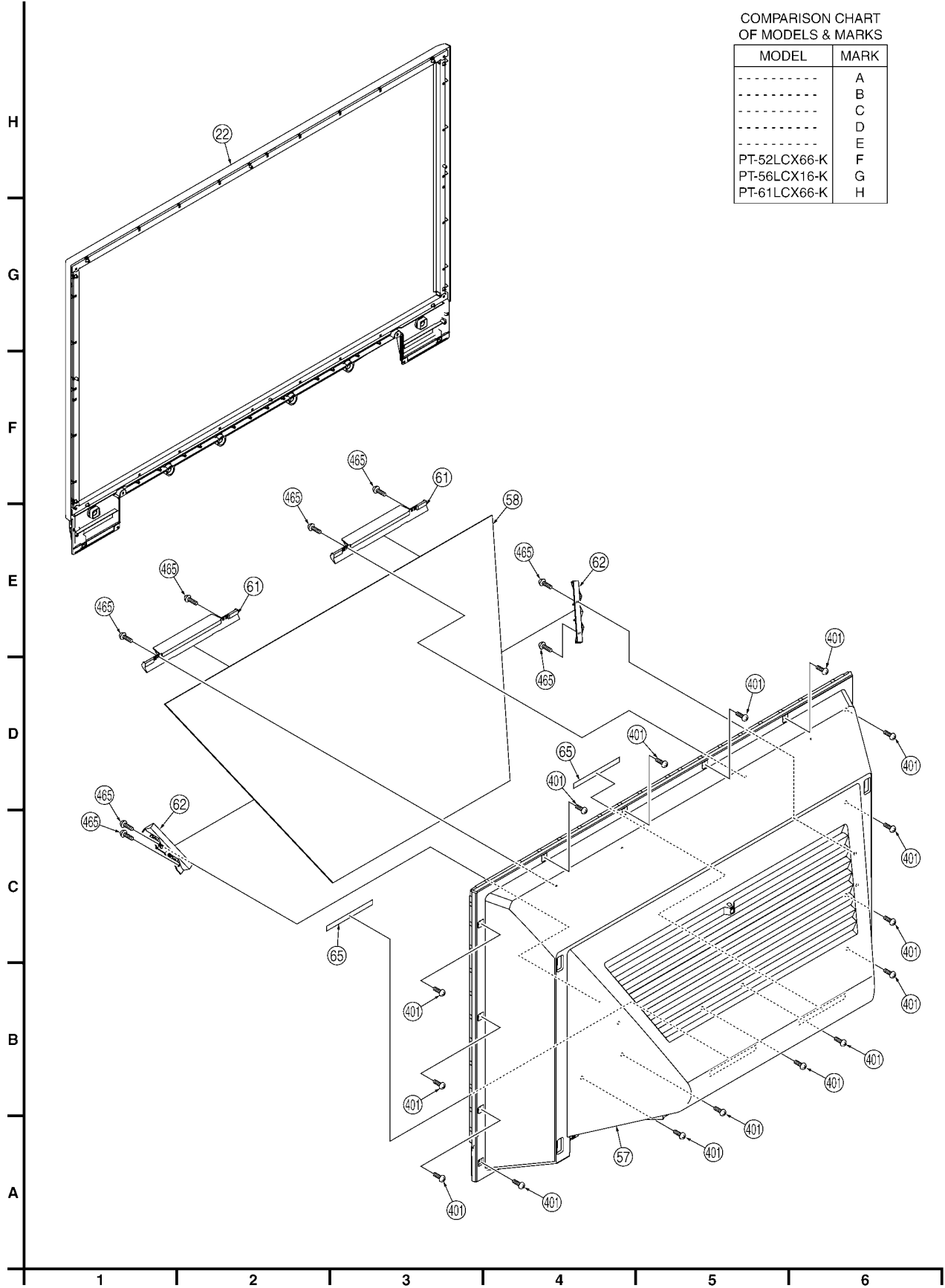
16.2. BASE BODY SECTION

② BASE BODY SECTION

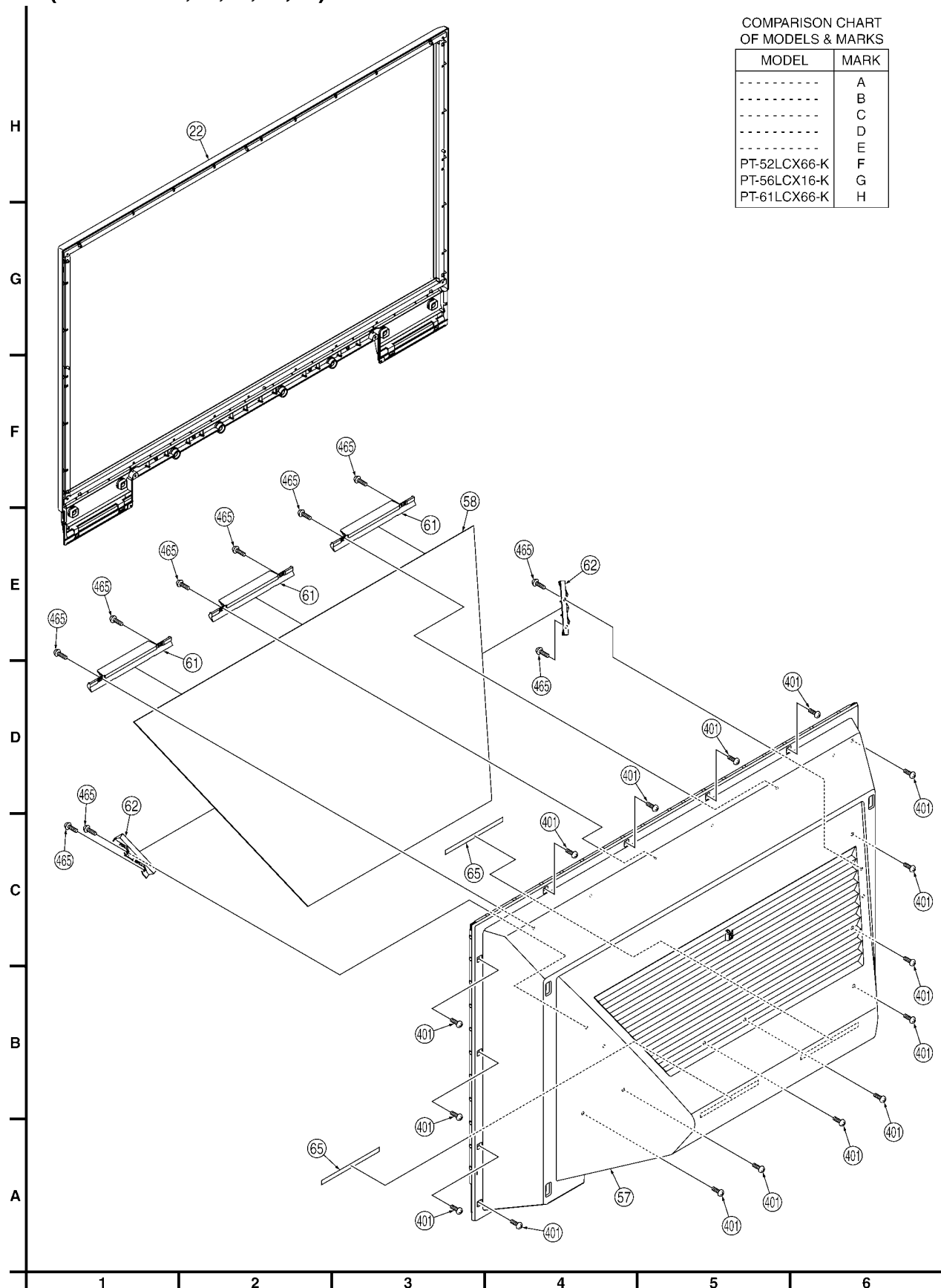


16.3. DISPLAY SECTION

③ 52 INCH DISPLAY SECTION (Models: A, D, F)



③ 56/61 INCH DISPLAY SECTION (Models: B, C, E, G, H)

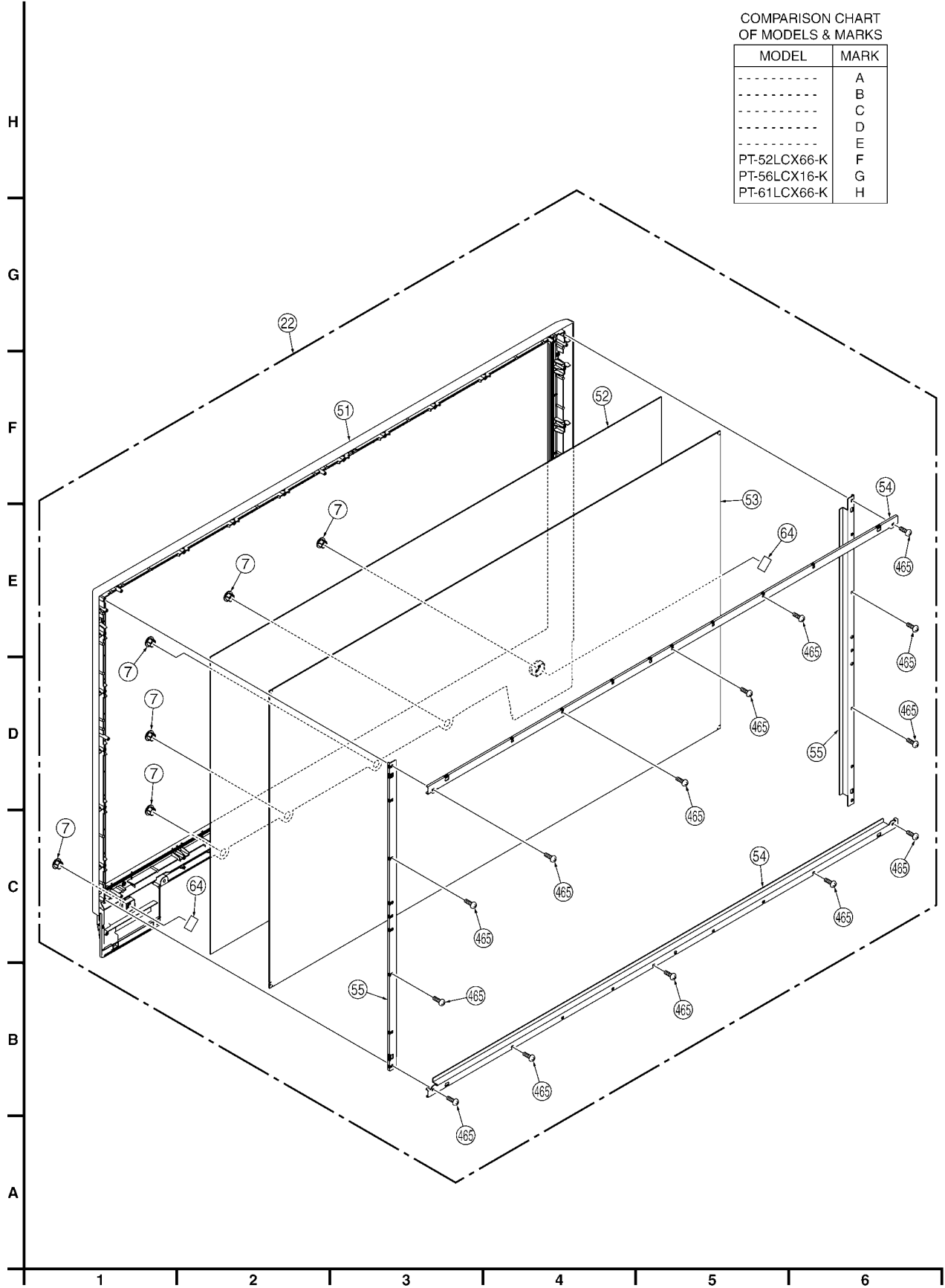


COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

16.4. SCREEN SECTION

④ 52 INCH SCREEN SECTION (Models: A, D, F)



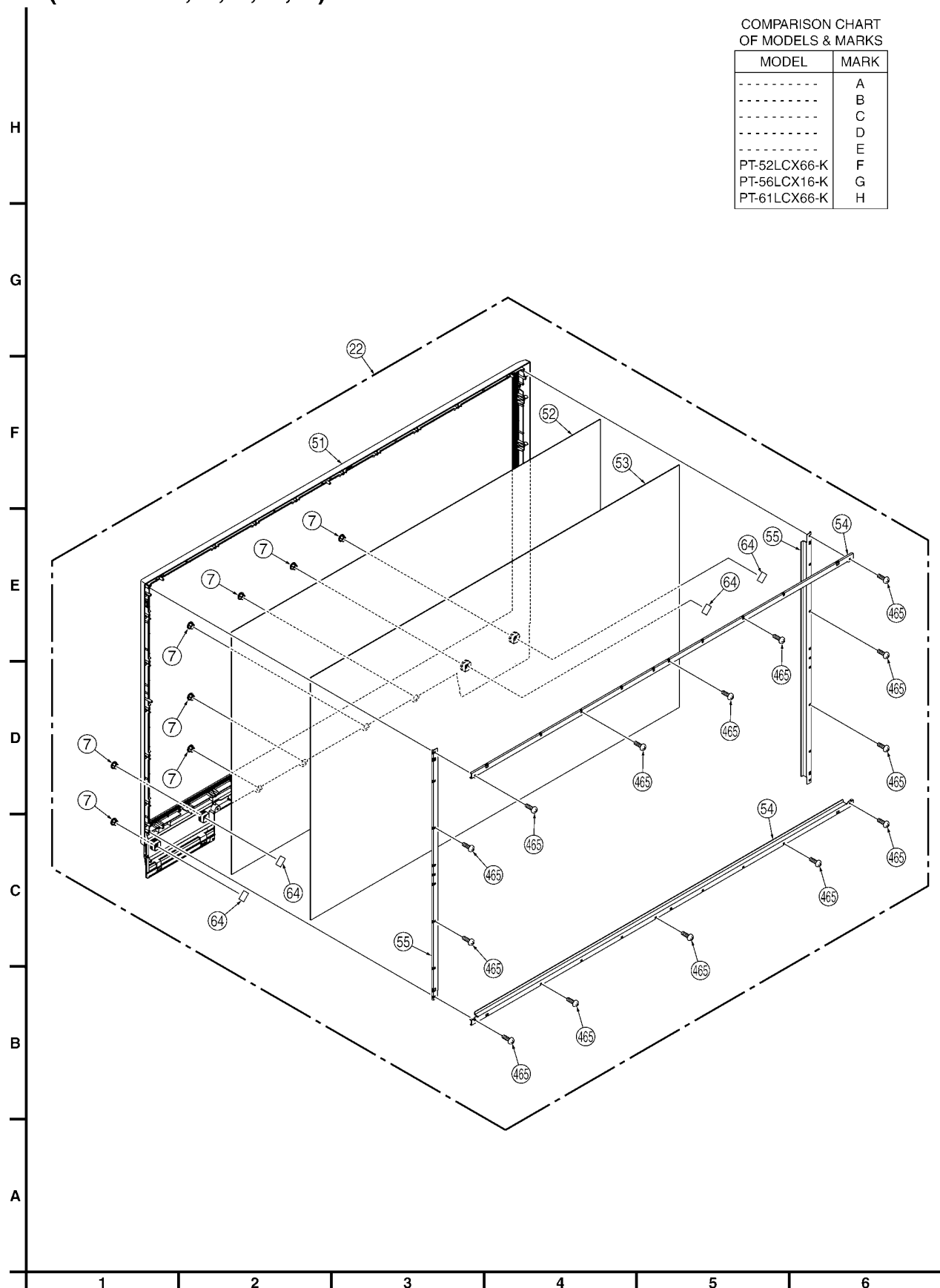
COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

4 56/61 INCH SCREEN SECTION (Models: B, C, E, G, H)

COMPARISON CHART
OF MODELS & MARKS


MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

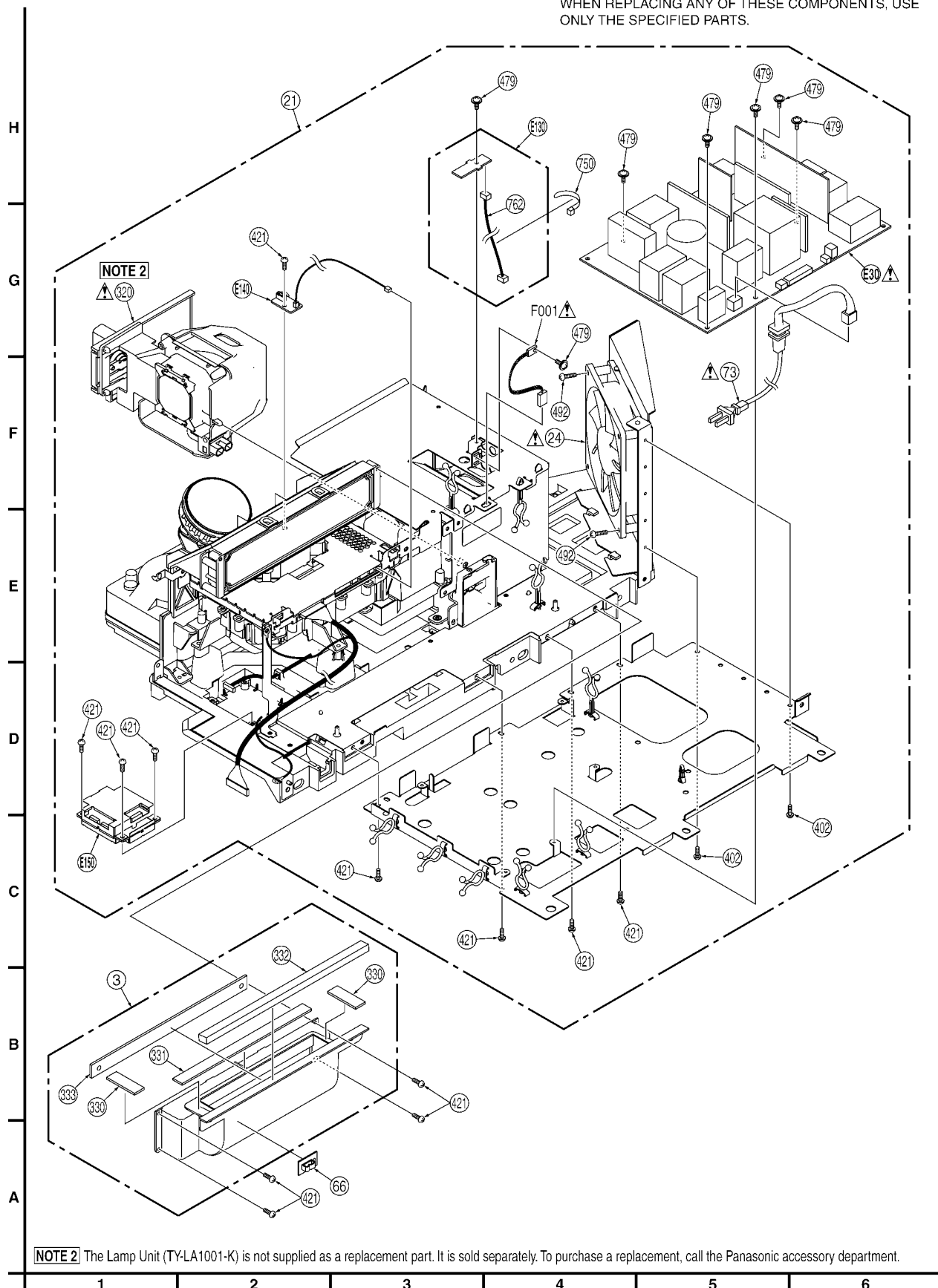


16.5. PROJECTION SECTION

5 PROJECTION SECTION

IMPORTANT SAFETY NOTICE

COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

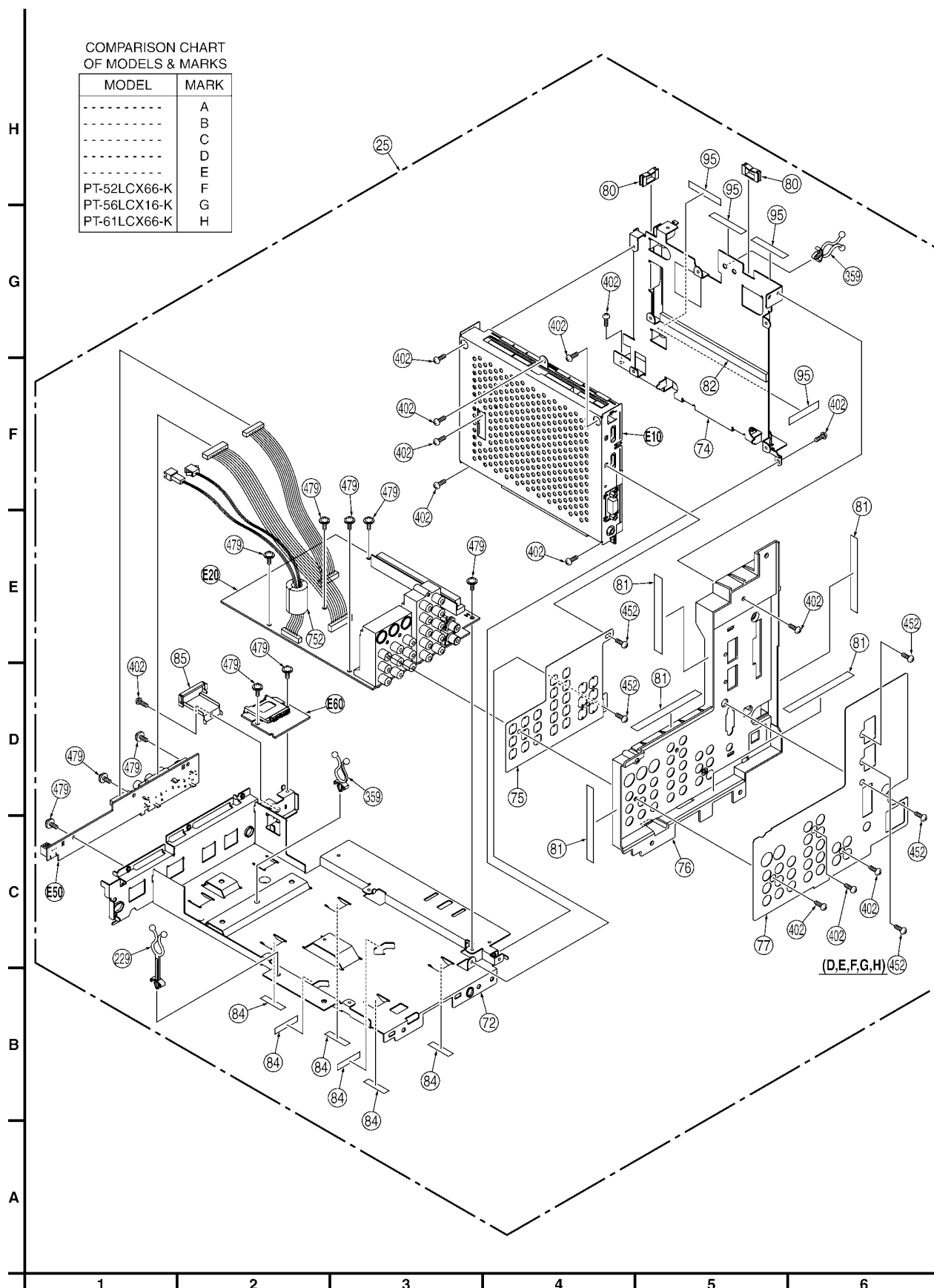


16.6. TV UNIT SECTION (1)

⑥ TV UNIT SECTION (1)

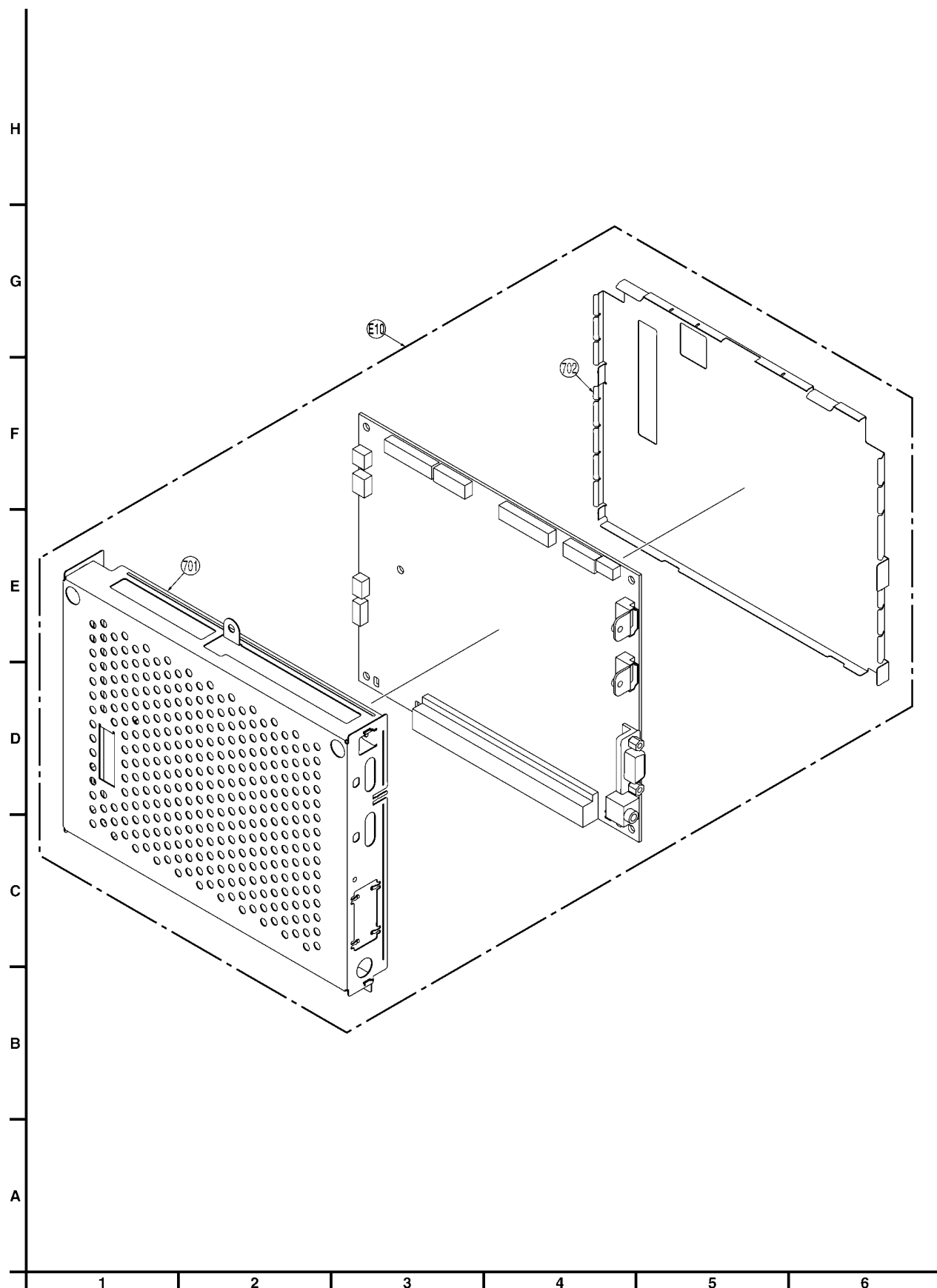
COMPARISON CHART
OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H



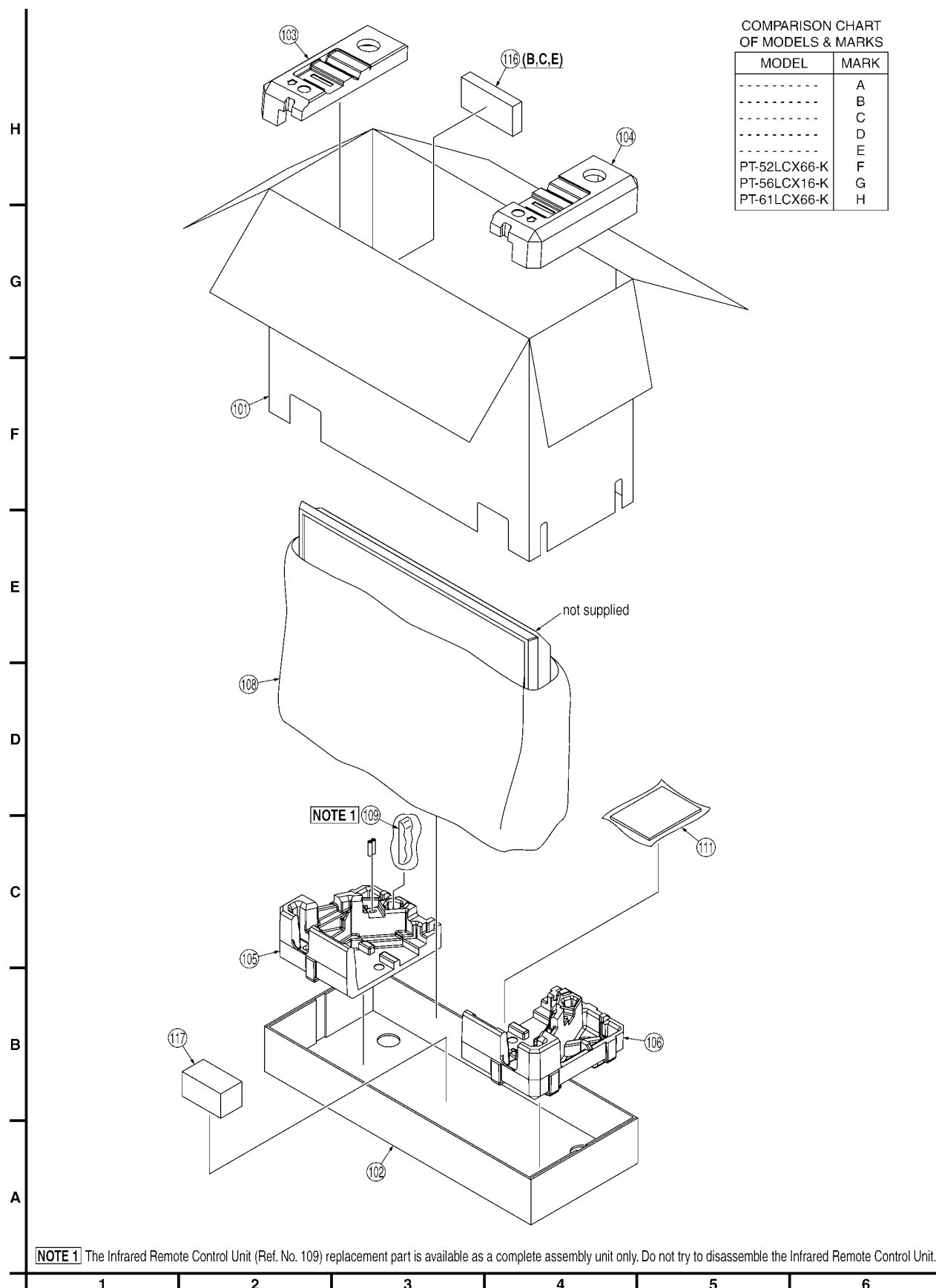
16.7. TV UNIT SECTION (2)

7 TV UNIT SECTION (2)



16.8. PACKING PARTS AND ACCESSORIES SECTION

⑧ PACKING PARTS AND ACCESSORIES SECTION




17 Replacement Parts List (Cabinet Section)

BEFORE REPLACING PARTS, READ THE FOLLOWING:

17.1. REPLACEMENT NOTES

17.1.1. General Notes

1. Use only original replacement parts:
To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list.
2. **IMPORTANT SAFETY NOTICE**
Components identified by the sign  have special characteristics important for safety. When replacing any of these components, use only the specified parts.
3. **SPECIAL NOTE**
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.
4. Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
5. Parts different in shape or size may be used. However, only interchangeable parts will be supplied as service replacement parts.
6. Definition of Parts supplier:
 - a. Parts with mark "PSEC" in the Remarks column are supplied from PSEC.
 - b. Parts without mark in the Remarks column are supplied from PASC-NPC.
7. Item numbers with capital letter E (Example: E10, E20,...) in the Ref. No. column are shown in the exploded views.
8. Parts whose Ref. Nos. are the same are interchangeable as replacement parts. Any of these parts may be ordered and used as a replacement part.

17.1.2. Mechanical Replacement Notes

1. Section No. of parts shown in Exploded Views are indicated in the Remarks column.
2. Abbreviation
RTL: Retention Time Limited
This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.
3. After replacing the Projection Unit (Ref. No. 21) or the Base Body Unit (Ref. No. 40), be sure to perform "ADJUSTMENT of the Projection Unit." Refer to "WHEN REINSTALLING THE PROJECTION UNIT OR BASE BODY UNIT INTO THE UNIT AT THE USER'S LOCATION"; in Adjustment Procedures 1.
4. The Infrared Remote Control Unit (Ref. No. 109) replacement part is available as a complete assembly unit only. Do not try to disassemble the Infrared Remote Control Unit.

17.1.3. Electrical Replacement Notes

1. Unless otherwise specified;
All resistors are in Ω , K = 1,000 Ω , M = 1,000 k Ω .
2. Abbreviation

RTL:	Retention Time Limited
	This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.
NR:	Non Repairable Board Ass'y
MGF CHIP:	Metal Glaze Film Chip
C CHIP:	Ceramic Chip
COMPLX CMP:	Complex Component
W FLMPRF:	Wirewound Flameproof
C.B.A.:	Circuit Board Assembly
P.C.B.:	Printed Circuit Board
E.S.D.:	Electrostatically Sensitive Devices
3. When replacing 0 Ω resistor, a wire can be substituted for it.
4. Parts with mark "CSP" in the Remarks column are CSP (Chip Size Package) IC.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

17.2. MECHANICAL REPLACEMENT PARTS LIST

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

Definition of Parts supplier:

1. Parts with mark "PSEC" in the Remarks column are supplied from PSEC.
2. Parts without mark in the Remarks column are supplied from PASC-NPC.

MECHANICAL REPLACEMENT PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
1	LSKU0041	BASE BODY	2
3	LSXA0683	TOP DUCT 3 UNIT	5
5	LSGL0499	IRFRARED PIECE	2
6	LSMC0151	PANEL SPRING	2
7	LSKC0008	LATCH	4
8	LSGH0069	FRONT JACK SHEET	2
9	LSYF0593	FRONT COVER UNIT (A,D,F)	1
9	LSYF0594	FRONT COVER UNIT (B,E,G)	1
9	LSYF0595	FRONT COVER UNIT (C,H)	1
10	LSJA0605	CONNECTOR CABLE W/PLUG	2
11	LSKA0031	RUBBER FOOT	2
12	LSYF0605	OPTICAL COVER UNIT	2
13	LSYK1831	LAMP COVER UNIT	2
17	LSYF0606	REAR COVER UNIT	1
21	LSXA0771-HB	PROJECTION UNIT (A,B,D,E,F,G)	5 RTL PSEC
21	LSXA0827-HB	PROJECTION UNIT (C,H)	5 RTL PSEC
22	LSYK1823	SCREEN UNIT (A,F)	3,4
22	LSYK1888	SCREEN UNIT (B) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	3,4
or 22	LSYK1871	SCREEN UNIT (B) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	3,4
22	LSYK1825	SCREEN UNIT (C,H)	3,4
22	LSYK1874	SCREEN UNIT (D)	3,4
22	LSYK1889	SCREEN UNIT (E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	3,4
or 22	LSYK1872	SCREEN UNIT (E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	3,4
23	TMM14414	STRIKE	1
24	L6FAYYYH0015	FAN 3	5 △
25	LSXY0994	TV UNIT (A,B,C)	1,6 RTL
25	LSXY1035	TV UNIT (D,E,F,G,H)	1,6 RTL
27	LSSC0867	CONNECTING PLATE F,STEEL	2
28	LSMG0171	SPACER	2
30	LSYF0599	FRONT DOOR UNIT	1
31	EAS15S19A	LOUDSPEAKER	2

Ref. No.	Part No.	Part Name & Description	Remarks
36	LSMG0169	RUBBER WASHER	2
40	LSVE0017	BASE BODY UNIT (A,B)	1 RTL
40	LSVE0020	BASE BODY UNIT (C)	1 RTL
40	LSVE0018	BASE BODY UNIT (D,E,F,G)	1 RTL
40	LSVE0021	BASE BODY UNIT (H)	1 RTL
42	LSGU0724	OPERATION BUTTON	2
43	LSGL0447	FRONT LED PIECE	1
44	LSGL0500	POWER LED PIECE	2
45	LSGU0725	POWER BUTTON	2
47	LSMB0321	POWER BUTTON SPRING	2
51	LSGY0313	ESCUTCHEON (A,F)	4
51	LSYK1880	ESCUTCHEON UNIT (B)	4
51	LSYK1875	ESCUTCHEON UNIT (C,H)	4
51	LSGY0326	ESCUTCHEON (D)	4
51	LSYK1881	ESCUTCHEON UNIT (E,G)	4
52	LSGP0528	LENTICULAR SCREEN (A,D,F)	4
52	LSGP0548	LENTICULAR SCREEN (B,E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	4
or 52	LSGP0502	LENTICULAR SCREEN (B,E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	4
52	LSGP0532	LENTICULAR SCREEN (C,H)	4
53	LSGP0527	FRESNEL LENS (A,D,F)	4
53	LSGP0547	FRESNEL LENS (B,E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	4
or 53	LSGP0501	FRESNEL LENS (B,E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	4
53	LSGP0531	FRESNEL LENS (C,H)	4
54	LSXA0733	SCREEN ANGLE H UNIT (A,D,F)	4
54	LSXA0830	SCREEN ANGLE H UNIT (B,E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	4
or 54	LSXA0825	SCREEN ANGLE H UNIT (B,E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	4
54	LSXA0736	SCREEN ANGLE H UNIT (C,H)	4
55	LSXA0734	SCREEN ANGLE V UNIT (A,D,F)	4
55	LSXA0831	SCREEN ANGLE V UNIT (B,E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	4
or 55	LSXA0826	SCREEN ANGLE V UNIT (B,E,G) *Refer to "Replacement Note for 56 inch Screen Unit" in Disassembly and Assembly Instructions.	4
55	LSXA0738	SCREEN ANGLE V UNIT (C,H)	4
56	LSGB0056	PANASONIC BADGE	1
57	LSGV0129	BACK COVER (A,D,F)	3
57	LSGV0130	BACK COVER (B,E,G)	3
57	LSGV0131	BACK COVER (C,H)	3
58	LSDL0310	MIRROR (A,D,F)	3
58	LSDL0311	MIRROR (B,E,G)	3
58	LSDL0312	MIRROR (C,H)	3
61	LSYF0602	MIRROR HOLDER H UNIT	3
62	LSYF0603	MIRROR HOLDER V UNIT	3
64	LSMF0505	SPACER	4
65	LSMF0499	SPACER (A,B,D,E,F,G)	3
65	LSMF0500	SPACER (C,H)	3
66	LSGP0372	CLAMPER	5
72	LSMA0923	BASE P.C.B. MOUNT METAL	6
73	LSJA0531	AC CORD W/PLUG	5 PSEC △

Ref. No.	Part No.	Part Name & Description	Remarks
74	LSMA0924	MAIN P.C.B. MOUNT METAL	6
75	LSSC0877	REAR JACK GROUNDING PLATE,STEEL	6
76	LSJH0093	REAR JACK HOLDER	6
77	LSGH0070	REAR JACK SHEET (A,B,C)	6
77	LSGH0077	REAR JACK SHEET (D,E,F,G,H)	6
78	LSCM0150	CONNECTING PLATE R,STEEL	1
80	TMME075	EDGE SADDLE	6
81	LSGH0071	REAR JACK CUSHION	6
82	LSMF0524	CUSHION	6
84	LSGH0076	SHEET	6
85	LSSC0866	SD SHIELD CASE,STEEL	6
95	VMFS0116	SHEET	6
98	LSMF0509	DOOR SPACER	1
99	LSMF0469	SHEET	1
101	LSPG2209	CARTON BOX (A,F)	8
101	LSPG2210	CARTON BOX (B)	8
101	LSPG2211	CARTON BOX (C,H)	8
101	LSPG2290	CARTON BOX (D)	8
101	LSPG2291	CARTON BOX (E)	8
101	LSPG2266	CARTON BOX (G)	8
102	LSPG2212	CARTON BOX BOTTOM (A,D,F)	8
102	LSPG2213	CARTON BOX BOTTOM (B,E,G)	8
102	LSPG2214	CARTON BOX BOTTOM (C,H)	8
103	LSPN0703	CUSHION TOP-LEFT,STYROFORM (A,D,F)	8
103	LSPN0704	CUSHION TOP-LEFT,STYROFORM (B,E,G)	8
103	LSPN0705	CUSHION TOP-LEFT,STYROFORM (C,H)	8
104	LSPN0706	CUSHION TOP-RIGHT,STYROFORM (A,D,F)	8
104	LSPN0707	CUSHION TOP-RIGHT,STYROFORM (B,E,G)	8
104	LSPN0708	CUSHION TOP-RIGHT,STYROFORM (C,H)	8
105	LSPN0709	CUSHION BOTTOM-LEFT,STYROFORM (A,D,F)	8
105	LSPN0710	CUSHION BOTTOM-LEFT,STYROFORM (B,E,G)	8
105	LSPN0711	CUSHION BOTTOM-LEFT,STYROFORM (C,H)	8
106	LSPN0712	CUSHION BOTTOM-RIGHT,STYROFORM (A,D,F)	8
106	LSPN0713	CUSHION BOTTOM-RIGHT,STYROFORM (B,E,G)	8
106	LSPN0714	CUSHION BOTTOM-RIGHT,STYROFORM (C,H)	8
108	LSPF0111	BAG,POLYETHYLENE	8
109	EUR7613ZH0	INFRARED REMOTE CONTROL UNIT	8
111	LSQF1060	FAN BAG (A,B,C,E,F,G,H)	8
111	LSQF1060DE	FAN BAG (D)	8
116	LSPN0728	CUSHION CENTER,STYROFORM (B,C,E)	8
117	LSPN0729	CUSHION CENTER BOTTOM,STYROFORM	8
224	TMME047	CLAMPER	1
229	TMM16452	CLAMPER	6
330	LSMF0269	TOP DUCT 3 SPONGE 1	5
331	LSMF0270	TOP DUCT 3 SPONGE 2	5
332	LSMF0271	TOP DUCT 3 SPONGE 3	5
333	LSMF0272	TOP DUCT 3 SPONGE 4	5
359	LSGQ0176	CLAMPER	6
368	LSMF0435	SHEET	2
401	XTV4+16AFJ	TAPPING SCREW,STEEL	1,3
402	XTV3+8JFJ	TAPPING SCREW,STEEL	1,5,6
421	XTV3+8GFJ	TAPPING SCREW,STEEL	1,5
452	XTV3+8FFJ	TAPPING SCREW,STEEL	6
454	XTV4+16AFJK	TAPPING SCREW,STEEL	1
465	XTV4+12AFJ	TAPPING SCREW,STEEL	2,3,4
478	LSHD0099-FJ	SCREW W/WASHER,STEEL	2
479	XVE3+FJ8FJ	SCREW W/WASHER,STEEL	5,6
480	XTW3+8TFJ	TAPPING SCREW,STEEL	1
492	XTV3+30JFJ	TAPPING SCREW,STEEL	5
701	LSSC0878	MAIN SHIELD CASE TOP	7
702	LSSC0865	MAIN SHIELD CASE BOTTOM	7

Ref. No.	Part No.	Part Name & Description	Remarks
750	VZFS0006	CLAMPER	5
752	LSLQ0307	FERRITE CORE	6
762	LSJA0533	CONNECTOR CABLE W/PLUG	5 PSEC
E10	LSXA0774	MAIN P.C.B. (A,B,C)	6,7 E.S.D. RTL
E10	LSXA0790	MAIN P.C.B. (D,E,F,G,H)	6,7 E.S.D. RTL
E20	LSEP3197A	BASE P.C.B. (A,B,C)	6 E.S.D. RTL
E20	LSEP3197C	BASE P.C.B. (D,E,F,G,H)	6 E.S.D. RTL
E30	LSEP1206A1	POWER P.C.B.	5 E.S.D. RTL PSEC
E40	LSEP3201A	POWER SWITCH P.C.B.	2 RTL
E50	LSEP3200A	FRONT JACK/OPERATION P.C.B.	6 RTL
E60	LSEP3199A	SD CARD P.C.B.	6 RTL
E100	LSEP3207F	DIGITAL TUNER P.C.B.	1 RTL
E130	LSEP3137B	THERMISTOR 2 P.C.B.	5 RTL PSEC
E140	LSEP3160A	COVER SWITCH P.C.B.	5 RTL PSEC
E150	LSXA0773	IRIS P.C.B.	5 RTL PSEC

17.3. OPTIONAL ACCESSORY REPLACEMENT PARTS LIST

17.3.1. LAMP UNIT

Ref. No.2	Part No.	Part Name & Description	Remarks
320	TY-LA1001-K	LAMP UNIT	5 NOTE

NOTE:

The Lamp Unit (TY-LA1001-K) is not supplied as a replacement part. It is sold separately. To purchase a replacement, call the Panasonic accessory department.

17.4. SERVICE FIXTURES AND TOOLS REPLACEMENT PARTS LIST

Definition of Parts supplier:

1. All parts are supplied from PSEC.

SERVICE FIXTURES AND TOOLS

Ref. No.	Part No.	Part Name & Description	Remarks
	LSEP3112A	RELAY P.C.B.	PSEC
	LSUA0042	LCD PANEL FLAT EXTENSION CABLE	PSEC
	LSUA0038	POWER EXTENSION CABLE	PSEC
	LSUA0039	FAN1,3 EXTENSION CABLE	PSEC
	LSUA0040	FAN2 EXTENSION CABLE	PSEC
	LSEP3216A	MONITOR P.C.B.	PSEC
	LSUA0041	COVER SWITCH DEFEAT CABLE	PSEC
	LSUA0013	THERMISTOR 2 DEFEAT CABLE	PSEC
	LSUA0043	RS232C I/F TOOL	PSEC

17.5. ELECTRICAL REPLACEMENT PARTS LIST

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

Definition of Parts supplier:

1. Parts with mark "PSEC" in the Remarks column are supplied from PSEC.
2. Parts without mark in the Remarks column are supplied from PASC-NPC.

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E10	LSXA0774	MAIN P.C.B. (A,B,C)	E.S.D. RTL
E10	LSXA0790	MAIN P.C.B. (D,E,F,G,H)	E.S.D. RTL
E20	LSEP3197A	BASE P.C.B. (A,B,C)	E.S.D. RTL
E20	LSEP3197C	BASE P.C.B. (D,E,F,G,H)	E.S.D. RTL
E30	LSEP1206A1	POWER P.C.B.	△ E.S.D. RTL PSEC
E40	LSEP3201A	POWER SWITCH P.C.B.	RTL
E50	LSEP3200A	FRONT JACK/OPERATION P.C.B.	RTL
E60	LSEP3199A	SD CARD P.C.B.	RTL
E100	LSEP3207F	DIGITAL TUNER P.C.B.	E.S.D. RTL
E130	LSEP3137B	THERMISTOR 2 P.C.B.	RTL PSEC
E140	LSEP3160A	COVER SWITCH P.C.B.	RTL PSEC
E150	LSXA0773	IRIS P.C.B.	RTL PSEC

17.5.1. MAIN P.C.B.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC1100	C0DBAZH00013	IC, LINEAR	
IC1102	C0DBAZG00034	IC, LINEAR	
IC1103	C0DBAZG00034	IC, LINEAR	
IC1104	C0CBCDD00004	IC, LINEAR	
IC1105	C0CBCBD00008	IC, LINEAR	
IC5000	CIAB00002456	IC, LINEAR	
IC5001	CIAB00002234	IC, LINEAR	CSP
IC5002	C3ABQY000008	IC, D RAM	E.S.D. CSP
IC5003	C0DBEJG00001	IC, LINEAR	
IC5004	C0CBCAC00136	IC, LINEAR	
IC5005	C0CBCAC00275	IC, LINEAR	
IC5006	C0CBCBF00009	IC, LINEAR	
IC5007	C0CBCAC00275	IC, LINEAR	
IC5008	C0JBAB000619	IC, LOGIC	E.S.D.
IC5009	C0DBZFG00055	IC, LINEAR	
IC5010	C0CBCAC00136	IC, LINEAR	
IC5011	CI1BZ0002790	IC, CMOS STANDARD LOGIC	E.S.D.
IC5012	C0ZBZ0000901	IC, LINEAR	
IC5022	C0JBAB0002102	IC, LOGIC	E.S.D.
IC5700	C0JBCZ000523	IC, LOGIC	E.S.D.
IC5701	C0CBCBD00008	IC, LINEAR	
IC5800	C0FBK000047	IC, LINEAR	
IC5801	CIAB00002535	IC, LINEAR	
IC5802	LSSK0092	IC, EEP ROM	E.S.D.
IC5803	LSSK0093	IC, EEP ROM (D,E,F,G,H)	E.S.D.
IC5804	C0ABBB000256	IC, LINEAR	
IC5805	C0DBAFF00019	IC, LINEAR	
IC6000	C3EBKC000008	IC, 128K EEP ROM	E.S.D.
IC6001	MN102H90MTZ1	IC, 16BIT MICROCONTROLLER	E.S.D.
IC6002	C0EBE0000436	IC, LINEAR	
IC6003	LSSK0095	IC, FLASH MEMORY	E.S.D.
IC6005	C0EBC0000208	IC, LINEAR	
IC6006	C0JBAA000455	IC, LOGIC	E.S.D.
IC6007	C0JBAA000455	IC, LOGIC	E.S.D.
IC6012	C0JBAA000455	IC, LOGIC	E.S.D.

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q1100	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q1100	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q1102	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q1102	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q1103	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q1103	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q1104	BlDHED000008	IC, LINEAR	
Q1105	BlDHED000008	IC, LINEAR	
Q1106	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q1106	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q1107	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or Q1107	BlADCF000063	TRANSISTOR SI PNP CHIP	
or Q1107	BlADCF000075	TRANSISTOR SI PNP CHIP	
Q1108	2SB1218ASL	TRANSISTOR SI PNP CHIP	
Q1109	2SB1218ASL	TRANSISTOR SI PNP CHIP	
Q5000	2SD0601AQL	TRANSISTOR SI NPN CHIP	
Q5002	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5004	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5008	2SD0601AQL	TRANSISTOR SI NPN CHIP	
Q5009	2SD0601AQL	TRANSISTOR SI NPN CHIP	
Q5010	2SD0601AQL	TRANSISTOR SI NPN CHIP	
Q5021	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or Q5021	BlADCF000063	TRANSISTOR SI PNP CHIP	
or Q5021	BlADCF000075	TRANSISTOR SI PNP CHIP	
Q5802	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5802	BlABCF000020	TRANSISTOR SI NPN CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
Q5804	2SD1819A0L	TRANSISTOR SI NPN CHIP (D,E,F,G,H)	
or Q5804	BlABCF000020	TRANSISTOR SI NPN CHIP (D,E,F,G,H)	
Q5807	UNR521400L	TRANSISTOR SI NPN CHIP	
or Q5807	BlGBCFJN0009	TRANSISTOR SI NPN CHIP	
Q5818	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5818	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q5819	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5819	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q5820	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5820	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q5821	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5821	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q5823	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5823	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q5827	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5827	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q5828	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5828	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q5829	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5829	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q6000	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6000	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q6001	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q6001	BlADCF000063	TRANSISTOR SI PNP CHIP	
Q6002	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6002	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q6003	2SA207700L	TRANSISTOR SI PNP CHIP	
Q6004	2SD0601ASL	TRANSISTOR SI NPN CHIP	
Q6005	2SD0601ASL	TRANSISTOR SI NPN CHIP	
Q6007	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6007	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q6008	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q6008	BlADCF000063	TRANSISTOR SI PNP CHIP	
Q6009	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6009	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q6010	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q6011	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q6011	BlADCF000063	TRANSISTOR SI PNP CHIP	
Q6012	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6012	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q6014	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6014	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q6015	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6015	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q6016	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q6016	BlADCF000063	TRANSISTOR SI PNP CHIP	
Q6017	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6017	BlABCF000020	TRANSISTOR SI NPN CHIP	
Q6027	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6027	BlABCF000020	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D1100	MA2J11300L	DIODE SI CHIP	
D1101	B0JCPD000026	DIODE SI CHIP	
D1102	B0JCPD000026	DIODE SI CHIP	
D1105	MA2J72900L	DIODE SI CHIP	
D1106	MAZ80510ML	DIODE ZENER CHIP 5.1V	
D1107	MA2J72900L	DIODE SI CHIP	
D1108	MAZ80910ML	DIODE ZENER CHIP 9.1V	
D1109	MAZ80680ML	DIODE ZENER CHIP 6.8V	
D1110	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D1111	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D1112	B0JCME000041	DIODE SI CHIP	
D1113	MA2J111008	DIODE SI CHIP	
or D1113	B0ACCK000005	DIODE SI CHIP	
or D1113	MA2J11100L	DIODE SI CHIP	
D1114	MA2J111008	DIODE SI CHIP	
or D1114	B0ACCK000005	DIODE SI CHIP	
or D1114	MA2J11100L	DIODE SI CHIP	
D1115	MA2J111008	DIODE SI CHIP	
or D1115	B0ACCK000005	DIODE SI CHIP	
or D1115	MA2J11100L	DIODE SI CHIP	
D1116	MA2J111008	DIODE SI CHIP	
or D1116	B0ACCK000005	DIODE SI CHIP	
or D1116	MA2J11100L	DIODE SI CHIP	
D1117	MA2J111008	DIODE SI CHIP	
or D1117	B0ACCK000005	DIODE SI CHIP	
or D1117	MA2J11100L	DIODE SI CHIP	
D1118	MA2J72900L	DIODE SI CHIP	
D1119	MA2J111008	DIODE SI CHIP	
or D1119	B0ACCK000005	DIODE SI CHIP	
or D1119	MA2J11100L	DIODE SI CHIP	
D1120	MA2J111008	DIODE SI CHIP	
or D1120	B0ACCK000005	DIODE SI CHIP	
or D1120	MA2J11100L	DIODE SI CHIP	
D1121	MA2J111008	DIODE SI CHIP	
or D1121	B0ACCK000005	DIODE SI CHIP	
or D1121	MA2J11100L	DIODE SI CHIP	
D1122	MA2J111008	DIODE SI CHIP	
or D1122	B0ACCK000005	DIODE SI CHIP	
or D1122	MA2J11100L	DIODE SI CHIP	
D1123	MA2J111008	DIODE SI CHIP	
or D1123	B0ACCK000005	DIODE SI CHIP	
or D1123	MA2J11100L	DIODE SI CHIP	
D1124	MA2J111008	DIODE SI CHIP	
or D1124	B0ACCK000005	DIODE SI CHIP	
or D1124	MA2J11100L	DIODE SI CHIP	
D1125	MA2J111008	DIODE SI CHIP	
or D1125	B0ACCK000005	DIODE SI CHIP	
or D1125	MA2J11100L	DIODE SI CHIP	
D1126	MA2J111008	DIODE SI CHIP	
or D1126	B0ACCK000005	DIODE SI CHIP	
or D1126	MA2J11100L	DIODE SI CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
D5000	MAZ31100ML	DIODE ZENER CHIP 11V	
D5001	MAZ31100ML	DIODE ZENER CHIP 11V	
D5002	MAZ31100ML	DIODE ZENER CHIP 11V	
D5003	MAZ31100ML	DIODE ZENER CHIP 11V	
D5800	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5801	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5802	EZJZ0V80008B	VARISTOR 80V	
D5803	EZJZ0V80008B	VARISTOR 80V	
D5804	EZJZ0V80008B	VARISTOR 80V	
D5805	EZJZ0V80008B	VARISTOR 80V	
D5806	EZJZ0V80008B	VARISTOR 80V	
D5807	EZJZ0V80008B	VARISTOR 80V	
D5808	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5809	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5810	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5811	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5812	EZJZ0V80008B	VARISTOR 80V	
D5813	EZJZ0V80008B	VARISTOR 80V	
D5814	EZJZ0V80008B	VARISTOR 80V	
D5815	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5816	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5817	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5818	EZJZ0V80008B	VARISTOR 80V	
D5819	EZJZ0V80008B	VARISTOR 80V (D,E,F,G,H)	
D5820	MA3X152E0L	DIODE SI CHIP (D,E,F,G,H)	
or	B0ADCJ000007	DIODE SI CHIP (D,E,F,G,H)	
D5820			
D5821	MA3X152E0L	DIODE SI CHIP	
or	B0ADCJ000007	DIODE SI CHIP	
D5821			
D5822	EZJZ0V80008B	VARISTOR 80V	
D5824	B0JCGD000002	DIODE SI CHIP	
D6001	MA2J111008	DIODE SI CHIP	
or	B0ACCK000005	DIODE SI CHIP	
D6001			
or	MA2J11100L	DIODE SI CHIP	
D6001			

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R1100	ERJ6GEYJ470V	MGF CHIP 1/10W 47	
R1101	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1102	ERJ12YJ100H	MGF CHIP 1/2W 10	
R1103	DOHD184ZA002	MGF CHIP 1/10W 180K	
R1104	DOHD102ZA002	MGF CHIP 1/10W 1K	
R1105	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R1106	DOHD220ZA006	MGF CHIP 1/10W 22	
R1108	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R1109	DOHD391ZA002	MGF CHIP 1/10W 390	
R1110	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1111	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R1112	DOHD103ZA002	MGF CHIP 1/10W 10K	
R1116	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
R1117	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
R1118	ERJ3EKF1001V	MGF CHIP 1/16W 1K	
R1123	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1126	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1128	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1129	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R1130	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1131	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R1132	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1133	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R1134	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1135	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1136	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1137	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R1138	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1139	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R1140	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1141	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R1142	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R1143	ERJ3GEYJ124V	MGF CHIP 1/16W 120K	

Ref. No.	Part No.	Part Name & Description	Remarks
R1144	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1145	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
R1146	ERJ3EKF3901V	MGF CHIP 1/16W 3.9K	
R1147	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
R1148	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
R1149	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
R1150	ERJ3EKF1541V	MGF CHIP 1/16W 1.54K	
R1151	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
R1152	ERJ3EKF1001V	MGF CHIP 1/16W 1K	
R1153	ERJ3EKF2200V	MGF CHIP 1/16W 220	
R1154	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
R1155	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
R1156	ERJ14BSJR10U	MGF CHIP 1/4W 0.1	
R1157	ERJ14BSJR10U	MGF CHIP 1/4W 0.1	
R1158	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R1160	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1161	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1164	ERJ14BSJR10U	MGF CHIP 1/4W 0.1	
R3001	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3002	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3007	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3008	J0JBC0000014	BEAD INDUCTOR	
R3009	J0JBC0000014	BEAD INDUCTOR	
R3010	J0JBC0000014	BEAD INDUCTOR	
R3011	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3012	J0JBC0000014	BEAD INDUCTOR	
R3013	J0JBC0000014	BEAD INDUCTOR	
R3014	J0JBC0000014	BEAD INDUCTOR	
R3015	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3016	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3017	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3018	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3019	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3021	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3024	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3025	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3039	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3040	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3041	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3042	ERA3YHD750V	MGF CHIP 1/16W 75	
R3043	ERA3YHD750V	MGF CHIP 1/16W 75	
R3044	ERA3YHD750V	MGF CHIP 1/16W 75	
R3045	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3046	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3049	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R3050	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5001	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R5002	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5003	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5004	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5005	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5006	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5007	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5008	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5009	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5010	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5011	EXB38V220JV	ARRAY CHIP 22	
R5012	EXB38V220JV	ARRAY CHIP 22	
R5013	EXB38V220JV	ARRAY CHIP 22	
R5014	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5015	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5016	EXB38V220JV	ARRAY CHIP 22	
R5017	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5018	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5019	EXB38V220JV	ARRAY CHIP 22	
R5020	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5023	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5027	ERJ3EKF1801V	MGF CHIP 1/16W 1.8K	
R5028	ERJ3EKF1801V	MGF CHIP 1/16W 1.8K	
R5029	ERJ3EKF1301V	MGF CHIP 1/16W 1.3K	
R5030	ERJ3EKF1301V	MGF CHIP 1/16W 1.3K	
R5031	ERJ3EKF1741V	MGF CHIP 1/16W 1.74K	
R5032	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R5033	ERJ3EKF1741V	MGF CHIP 1/16W 1.74K	
R5034	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5035	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5036	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5037	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5038	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5039	ERJ3EKF3002V	MGF CHIP 1/16W 30K	
R5040	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5041	ERJ3EKF3002V	MGF CHIP 1/16W 30K	
R5042	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5043	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R5044	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5045	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5046	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5047	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5048	EXB38V101JV	ARRAY CHIP 100	
R5049	EXB38V101JV	ARRAY CHIP 100	
R5050	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5051	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5052	ERJ3GEYF101V	MGF CHIP 1/16W 100	
R5054	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5055	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5058	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R5059	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R5062	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5063	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5064	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5065	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5066	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5067	ERJ3EKF1741V	MGF CHIP 1/16W 1.74K	
R5068	ERJ3EKF1741V	MGF CHIP 1/16W 1.74K	
R5078	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5079	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5080	EXB38V101JV	ARRAY CHIP 100	
R5081	EXB38V101JV	ARRAY CHIP 100	
R5082	EXB38V101JV	ARRAY CHIP 100	
R5083	EXB38V101JV	ARRAY CHIP 100	
R5084	EXB38V101JV	ARRAY CHIP 100	
R5085	EXB38V101JV	ARRAY CHIP 100	
R5086	EXB38V101JV	ARRAY CHIP 100	
R5087	EXB38V101JV	ARRAY CHIP 100	
R5088	EXB38V101JV	ARRAY CHIP 100	
R5089	EXB38V101JV	ARRAY CHIP 100	
R5090	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5092	ERJ3GEYJ203V	MGF CHIP 1/16W 20K	
R5093	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R5094	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5095	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5096	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R5097	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5098	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5099	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5100	ERJ3EKF4302V	MGF CHIP 1/16W 43K	
R5101	ERJ3EKF1202V	MGF CHIP 1/16W 12K	
R5102	ERJ3EKF1800V	MGF CHIP 1/16W 180	
R5103	ERJ3EKF2001V	MGF CHIP 1/16W 2K	
R5107	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5108	ERJ3GEYJ270V	MGF CHIP 1/16W 27	
R5109	ERJ3GEYJ270V	MGF CHIP 1/16W 27	
R5110	ERJ3GEYJ270V	MGF CHIP 1/16W 27	
R5112	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5113	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R5114	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5115	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5116	ERJ3EKF1500V	MGF CHIP 1/16W 150	
R5119	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5120	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5121	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5122	EXB38V820JV	ARRAY CHIP 82	
R5123	EXB38V820JV	ARRAY CHIP 82	
R5124	EXB38V820JV	ARRAY CHIP 82	
R5125	EXB38V820JV	ARRAY CHIP 82	
R5126	EXB38V820JV	ARRAY CHIP 82	

Ref. No.	Part No.	Part Name & Description	Remarks
R5127	EXB38V820JV	ARRAY CHIP 82	
R5128	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5129	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5130	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5131	ERJ3EKF1691V	MGF CHIP 1/16W 1.69K	
R5132	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5133	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5134	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5135	ERJ3GEYJ391V	MGF CHIP 1/16W 390	
R5136	ERJ3EKF1001V	MGF CHIP 1/16W 1K	
R5137	ERJ3EKF1501V	MGF CHIP 1/16W 1.5K	
R5138	ERJ3EKF2201V	MGF CHIP 1/16W 2.2K	
R5139	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5140	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5141	ERJ3GEYJ152V	MGF CHIP 1/16W 1.5K	
R5142	ERJ3GEYJ152V	MGF CHIP 1/16W 1.5K	
R5143	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R5144	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R5147	ERJ3EKF1371V	MGF CHIP 1/16W 1.37K	
R5148	ERJ3EKF1600V	MGF CHIP 1/16W 160	
R5149	ERJ3GEYJ273V	MGF CHIP 1/16W 27K	
R5150	ERJ3EKF4302V	MGF CHIP 1/16W 43K	
R5153	ERJ3GEYJ331V	MGF CHIP 1/16W 330	
R5154	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5155	ERJ3GEYJ820V	MGF CHIP 1/16W 82	
R5156	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R5157	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5158	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5159	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5161	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5164	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5165	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5166	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5167	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5168	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5169	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5171	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5172	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5174	F1H1H102A219	C CHIP 50V 1000PF	
R5175	F1H1H102A219	C CHIP 50V 1000PF	
R5181	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5184	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5203	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5207	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5334	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5353	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5354	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R5355	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5356	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5359	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5701	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5702	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5704	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5705	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5706	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5707	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5708	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5709	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5710	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5711	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5712	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5713	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5714	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5715	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R5716	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5717	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5718	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5719	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5720	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5721	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5722	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5723	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5724	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R5725	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5726	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R5727	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5728	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5800	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5802	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5804	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5805	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5808	ERJ3GEYJ103V	MGF CHIP 1/16W 10K (D,E,F,G,H)	
R5809	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5810	ERJ3GEYJ103V	MGF CHIP 1/16W 10K (D,E,F,G,H)	
R5811	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5817	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5819	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5820	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5821	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5822	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5823	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5824	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5825	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5826	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5827	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K (A,B,C)	
R5828	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5829	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K (D,E,F,G,H)	
R5831	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K (D,E,F,G,H)	
R5833	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5834	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5835	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K (A,B,C)	
R5837	ERJ3GEYJ473V	MGF CHIP 1/16W 47K (D,E,F,G,H)	
R5838	ERJ3GEYJ473V	MGF CHIP 1/16W 47K (D,E,F,G,H)	
R5839	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5840	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5841	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5842	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5843	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5844	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5845	ERJ3GEYJ102V	MGF CHIP 1/16W 1K (D,E,F,G,H)	
R5846	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5847	ERJ3GEYJ6R8V	MGF CHIP 1/16W 6.8 (D,E,F,G,H)	
R5848	ERJ3GEYJ8R2V	MGF CHIP 1/16W 8.2	
R5849	ERJ3GEYJ6R8V	MGF CHIP 1/16W 6.8 (D,E,F,G,H)	
R5850	ERJ3GEYJ6R8V	MGF CHIP 1/16W 6.8 (D,E,F,G,H)	
R5851	ERJ3GEYJ8R2V	MGF CHIP 1/16W 8.2	
R5852	ERJ3GEYJ8R2V	MGF CHIP 1/16W 8.2	
R5853	ERJ3GEYJ6R8V	MGF CHIP 1/16W 6.8 (D,E,F,G,H)	
R5854	ERJ3GEYJ8R2V	MGF CHIP 1/16W 8.2	
R5855	ERJ3GEYJ8R2V	MGF CHIP 1/16W 8.2	
R5856	ERJ3GEYJ6R8V	MGF CHIP 1/16W 6.8 (D,E,F,G,H)	
R5857	ERJ3GEYJ6R8V	MGF CHIP 1/16W 6.8 (D,E,F,G,H)	
R5858	ERJ3GEYJ6R8V	MGF CHIP 1/16W 6.8 (D,E,F,G,H)	
R5859	ERJ3GEYJ8R2V	MGF CHIP 1/16W 8.2	
R5860	ERJ3GEYJ8R2V	MGF CHIP 1/16W 8.2	
R5861	ERJ3GEYJ8R2V	MGF CHIP 1/16W 8.2	
R5862	ERJ3GEYJ6R8V	MGF CHIP 1/16W 6.8 (D,E,F,G,H)	
R5864	EXB38V330JV	ARRAY CHIP 33	
R5865	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R5867	ERJ3GEYJ100V	MGF CHIP 1/16W 10 (D,E,F,G,H)	
R5871	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R5872	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R5874	ERJ3GEYJ330V	MGF CHIP 1/16W 33	

Ref. No.	Part No.	Part Name & Description	Remarks
R5875	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R5876	ERJ3GEYJ390V	MGF CHIP 1/16W 39	
R5877	ERJ3GEYJ390V	MGF CHIP 1/16W 39 (D,E,F,G,H)	
R5878	ERJ3GEYJ560V	MGF CHIP 1/16W 56 (D,E,F,G,H)	
R5879	ERJ3GEYJ560V	MGF CHIP 1/16W 56 (D,E,F,G,H)	
R5880	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5881	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5882	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R5883	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R5887	ERJ3GEYJ623V	MGF CHIP 1/16W 62K	
R5888	ERJ3GEYJ623V	MGF CHIP 1/16W 62K	
R5889	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R5890	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5891	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5893	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5894	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5895	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5896	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5897	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5898	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5900	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5904	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5907	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5909	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5911	ERJ3GEY0R00V	MGF CHIP 1/16W 0 (D,E,F,G,H)	
R5913	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5914	ERJ3GEY0R00V	MGF CHIP 1/16W 0 (D,E,F,G,H)	
R5915	ERJ3GEY0R00V	MGF CHIP 1/16W 0 (D,E,F,G,H)	
R5916	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5917	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5918	ERJ3GEY0R00V	MGF CHIP 1/16W 0 (D,E,F,G,H)	
R5919	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5920	EXB38V220JV	ARRAY CHIP 22	
R5921	EXB38V220JV	ARRAY CHIP 22	
R5922	EXB38V220JV	ARRAY CHIP 22	
R5923	EXB38V220JV	ARRAY CHIP 22	
R5924	EXB38V220JV	ARRAY CHIP 22	
R5925	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5927	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5929	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5930	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5931	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5932	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5933	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5934	ERJ3GEYJ224V	MGF CHIP 1/16W 220K	
R5935	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R5936	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R5937	ERJ3GEYF333V	MGF CHIP 1/16W 33K	
R5938	ERJ3GEYF333V	MGF CHIP 1/16W 33K	
R5942	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R5944	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R5945	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R5946	ERJ3GEYJ225V	MGF CHIP 1/16W 2.2M	
R5947	ERJ3GEYJ273V	MGF CHIP 1/16W 27K	
R5948	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5949	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5951	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5956	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5958	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5960	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5962	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R5963	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5964	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5965	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5985	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6000	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6002	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6004	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6007	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R6008	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R6010	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6011	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6013	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6014	EXB38V221JV	ARRAY CHIP 220	
R6015	EXB38V220JV	ARRAY CHIP 22	
R6016	EXB38V220JV	ARRAY CHIP 22	
R6017	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6018	EXB38V220JV	ARRAY CHIP 22	
R6019	EXB38V220JV	ARRAY CHIP 22	
R6020	EXB38V220JV	ARRAY CHIP 22	
R6021	EXB38V220JV	ARRAY CHIP 22	
R6022	EXB38V220JV	ARRAY CHIP 22	
R6023	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6024	EXB38V220JV	ARRAY CHIP 22	
R6025	EXB38V220JV	ARRAY CHIP 22	
R6026	EXB38V220JV	ARRAY CHIP 22	
R6027	EXB38V220JV	ARRAY CHIP 22	
R6028	EXB38V220JV	ARRAY CHIP 22	
R6029	EXB38V220JV	ARRAY CHIP 22	
R6030	EXB38V220JV	ARRAY CHIP 22	
R6031	EXB38V220JV	ARRAY CHIP 22	
R6032	EXB38V220JV	ARRAY CHIP 22	
R6033	EXB38V220JV	ARRAY CHIP 22	
R6034	EXB38VR000V	ARRAY CHIP 0	
R6035	EXB38VR000V	ARRAY CHIP 0	
R6036	EXB38VR000V	ARRAY CHIP 0	
R6037	EXB38VR000V	ARRAY CHIP 0	
R6038	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6039	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6040	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6041	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6044	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6045	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6046	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6047	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6049	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6051	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6052	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6053	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6054	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6055	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R6056	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6057	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R6058	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6059	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6060	EXB38V101JV	ARRAY CHIP 100	
R6061	ERJ3EKF1801V	MGF CHIP 1/16W 1.8K	
R6062	ERJ3EKF3901V	MGF CHIP 1/16W 3.9K	
R6063	ERJ3EKF6801V	MGF CHIP 1/16W 6.8K	
R6064	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R6065	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R6066	ERJ3EKF5601V	MGF CHIP 1/16W 5.6K	
R6067	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6068	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6069	EXB38V220JV	ARRAY CHIP 22	
R6070	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6071	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6072	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6073	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6074	ERJ3EKF5601V	MGF CHIP 1/16W 5.6K	
R6075	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6076	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6077	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R6078	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6079	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R6080	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R6083	EXB38V220JV	ARRAY CHIP 22	
R6084	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6089	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6090	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R6091	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6092	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6093	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6094	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6095	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6096	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6097	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6098	ERJ3GEYJ821V	MGF CHIP 1/16W 820	
R6099	ERJ3GEYJ474V	MGF CHIP 1/16W 470K	
R6100	ERJ3GEYJ474V	MGF CHIP 1/16W 470K	
R6101	ERJ3GEYJ124V	MGF CHIP 1/16W 120K	
R6102	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6103	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R6105	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6106	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6107	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6108	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R6109	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6112	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6113	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R6114	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6116	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6118	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6119	ERJ3GEYJ563V	MGF CHIP 1/16W 56K	
R6120	ERJ3GEYJ823V	MGF CHIP 1/16W 82K	
R6122	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6123	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6124	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6125	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6126	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6127	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6128	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6131	ERJ3GEYJ392V	MGF CHIP 1/16W 3.9K	
R6132	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R6133	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R6134	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R6135	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6136	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6141	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6142	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6143	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6144	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6145	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6146	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6147	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R6148	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6150	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6151	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R6152	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6153	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6154	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6155	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6156	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6157	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6158	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6159	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6164	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R6165	ERJ3GEYJ123V	MGF CHIP 1/16W 12K	
R6166	ERJ3GEYJ241V	MGF CHIP 1/16W 240	
R6167	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6169	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6172	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R6173	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6175	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R6177	ERJ3GEYJ392V	MGF CHIP 1/16W 3.9K	
R6179	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6181	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6191	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6192	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6193	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6194	ERJ3GEYJ153V	MGF CHIP 1/16W 15K	
R6195	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6196	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6197	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6198	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6199	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6201	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6202	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6206	J0JHC0000031	EMI FILTER CHIP	
R6207	J0JHC0000031	EMI FILTER CHIP	
R6208	J0JHC0000031	EMI FILTER CHIP	
R6209	J0JHC0000031	EMI FILTER CHIP	
R6210	J0JHC0000031	EMI FILTER CHIP	
R6211	J0JHC0000031	EMI FILTER CHIP	
R6212	J0JHC0000031	EMI FILTER CHIP	
R6213	J0JHC0000031	EMI FILTER CHIP	
R6214	J0JHC0000031	EMI FILTER CHIP	
R6215	J0JHC0000031	EMI FILTER CHIP	
R6216	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6221	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R6223	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6224	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6226	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6230	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6231	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R6233	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6234	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6238	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6250	ERJ3GEYJ473V	MGF CHIP 1/16W 47K (A,B,C)	
R6251	ERJ3GEYJ473V	MGF CHIP 1/16W 47K (D,E,F,G,H)	
R6253	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
JS6000	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C1101	ECJ1VB1E104K	C CHIP 25V 0.1UF	
C1102	ECJ1VB1C105K	C CHIP 16V 1UF	
C1104	ECJ1VB1E104K	C CHIP 25V 0.1UF	
C1105	ECJ2VC1H471J	C CHIP 50V 470PF	
C1106	F1H1H102A219	C CHIP 50V 1000PF	
C1107	F1J1H102A623	C CHIP 50V 1000PF	
C1108	F1H1H102A219	C CHIP 50V 1000PF	
C1110	F1H1H103A219	C CHIP 50V 0.01UF	
C1111	F1H1H103A219	C CHIP 50V 0.01UF	
C1112	F1H1H103A219	C CHIP 50V 0.01UF	
C1113	EEEFK1C681P	ELECTROLYTIC 16V 680UF	
C1114	F1H1C104A008	C CHIP 16V 0.1UF	
C1116	EEEFK1C471P	ELECTROLYTIC 16V 470UF	
C1117	EEEFK1C471P	ELECTROLYTIC 16V 470UF	
C1120	EEEFK1C681P	ELECTROLYTIC 16V 680UF	
C1121	EEEFK1C681P	ELECTROLYTIC 16V 680UF	
C1125	F1H0J1050012	C CHIP 6.3V 1UF	
C1126	F1H1H104A731	C CHIP 50V 0.1UF	
C1127	F1H1H103A219	C CHIP 50V 0.01UF	
C1128	ECJ1VB1C224K	C CHIP 16V 0.22UF	
C1129	F1H1H104A731	C CHIP 50V 0.1UF	
C1130	F1H1H104A731	C CHIP 50V 0.1UF	
C1131	F1H1H104A731	C CHIP 50V 0.1UF	
C1132	F1H1H103A220	C CHIP 50V 0.01UF	
C1133	F1H1H103A220	C CHIP 50V 0.01UF	
C1134	F1H1H104A731	C CHIP 50V 0.1UF	
C1135	ECJ1VB1C224K	C CHIP 16V 0.22UF	
C1136	F1H0J1050012	C CHIP 6.3V 1UF	
C1137	ECJ1VB1C224K	C CHIP 16V 0.22UF	
C1138	F1H1H104A731	C CHIP 50V 0.1UF	
C1139	F1H1H104A731	C CHIP 50V 0.1UF	
C1140	EEEFK1C101P	ELECTROLYTIC 16V 100UF	
C1141	F1H1H104A731	C CHIP 50V 0.1UF	
C1142	F1H1H104A731	C CHIP 50V 0.1UF	
C1143	F1H1H104A731	C CHIP 50V 0.1UF	
C1145	EEEFK1C471P	ELECTROLYTIC 16V 470UF	
C1146	EEEFK1C471P	ELECTROLYTIC 16V 470UF	
C1147	F1L1C2260012	C CHIP 16V 22UF	
C1149	EEEFK1C471P	ELECTROLYTIC 16V 470UF	
C3000	ECJ3YF1A106Z	C CHIP 10V 10UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C3001	ECJ3YF1A106Z	C CHIP 10V 10UF	
C3002	ECJ3YF1A106Z	C CHIP 10V 10UF	
C5000	F1H1C104A008	C CHIP 16V 0.1UF	
C5001	F1H1H102A219	C CHIP 50V 1000PF	
C5002	ECJ1VC1H120J	C CHIP 50V 12PF	
C5004	F1H1C104A008	C CHIP 16V 0.1UF	
C5005	F1H1C104A008	C CHIP 16V 0.1UF	
C5006	F1H1C104A008	C CHIP 16V 0.1UF	
C5007	F1H1C104A008	C CHIP 16V 0.1UF	
C5008	F1H1H103A220	C CHIP 50V 0.01UF	
C5009	F1H1H103A220	C CHIP 50V 0.01UF	
C5010	F1H1H103A220	C CHIP 50V 0.01UF	
C5011	F1H1C104A008	C CHIP 16V 0.1UF	
C5012	F1H1C104A008	C CHIP 16V 0.1UF	
C5013	F1H1C104A008	C CHIP 16V 0.1UF	
C5014	F1H1C104A008	C CHIP 16V 0.1UF	
C5015	F1H1C104A008	C CHIP 16V 0.1UF	
C5016	F1H1H103A220	C CHIP 50V 0.01UF	
C5017	F1H1H103A220	C CHIP 50V 0.01UF	
C5018	F1H1H103A220	C CHIP 50V 0.01UF	
C5019	F1H1H103A220	C CHIP 50V 0.01UF	
C5020	F1H1C104A008	C CHIP 16V 0.1UF	
C5021	F1H1C104A008	C CHIP 16V 0.1UF	
C5022	F1H1C104A008	C CHIP 16V 0.1UF	
C5023	F1H1C104A008	C CHIP 16V 0.1UF	
C5024	F1H1H103A220	C CHIP 50V 0.01UF	
C5025	F1H1H103A220	C CHIP 50V 0.01UF	
C5026	F1H1H103A220	C CHIP 50V 0.01UF	
C5027	F1H1H103A220	C CHIP 50V 0.01UF	
C5028	F1H1C104A008	C CHIP 16V 0.1UF	
C5029	F1H1C104A008	C CHIP 16V 0.1UF	
C5030	F1H1C104A008	C CHIP 16V 0.1UF	
C5031	F1H1C104A008	C CHIP 16V 0.1UF	
C5032	F1H1C104A008	C CHIP 16V 0.1UF	
C5033	F1H1C104A008	C CHIP 16V 0.1UF	
C5034	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C5035	EEFCD0G560R	ELECTROLYTIC CHIP 4V 56UF	
C5036	F2H0J220A010	ELECTROLYTIC CHIP 6.3V 22UF	
C5037	F1H1C104A008	C CHIP 16V 0.1UF	
C5038	F1H1C104A008	C CHIP 16V 0.1UF	
C5039	F1H1C104A008	C CHIP 16V 0.1UF	
C5040	F1H1C104A008	C CHIP 16V 0.1UF	
C5041	F1H1C104A008	C CHIP 16V 0.1UF	
C5042	F1H1C104A008	C CHIP 16V 0.1UF	
C5043	F1H1C104A008	C CHIP 16V 0.1UF	
C5044	F1H1C104A008	C CHIP 16V 0.1UF	
C5045	F1H1C104A008	C CHIP 16V 0.1UF	
C5046	F1H1C104A008	C CHIP 16V 0.1UF	
C5047	F1H1C104A008	C CHIP 16V 0.1UF	
C5048	F1H1C104A008	C CHIP 16V 0.1UF	
C5049	F1H1C104A008	C CHIP 16V 0.1UF	
C5050	F1H1C104A008	C CHIP 16V 0.1UF	
C5051	F1H1C104A008	C CHIP 16V 0.1UF	
C5052	F1H1C104A008	C CHIP 16V 0.1UF	
C5053	F1H1C104A008	C CHIP 16V 0.1UF	
C5054	F1H1C104A008	C CHIP 16V 0.1UF	
C5055	F1H1C104A008	C CHIP 16V 0.1UF	
C5056	F1H1C104A008	C CHIP 16V 0.1UF	
C5057	F1H1C104A008	C CHIP 16V 0.1UF	
C5058	F1H1C104A008	C CHIP 16V 0.1UF	
C5059	F1H1C104A008	C CHIP 16V 0.1UF	
C5060	F1H1C104A008	C CHIP 16V 0.1UF	
C5061	F1H1H102A219	C CHIP 50V 1000PF	
C5062	F1H1H102A219	C CHIP 50V 1000PF	
C5063	F1H1H102A219	C CHIP 50V 1000PF	
C5064	F1H1H102A219	C CHIP 50V 1000PF	
C5065	F1H1H102A219	C CHIP 50V 1000PF	
C5066	F1H1H102A219	C CHIP 50V 1000PF	
C5067	F1H1H102A219	C CHIP 50V 1000PF	
C5068	F1H1H102A219	C CHIP 50V 1000PF	
C5069	F1H1H102A219	C CHIP 50V 1000PF	
C5070	F1H1H102A219	C CHIP 50V 1000PF	
C5071	F1H1H102A219	C CHIP 50V 1000PF	

Ref. No.	Part No.	Part Name & Description	Remarks
C5072	F1H1H102A219	C CHIP 50V 1000PF	
C5073	F1H1H102A219	C CHIP 50V 1000PF	
C5074	F1H1H102A219	C CHIP 50V 1000PF	
C5075	F1H1H102A219	C CHIP 50V 1000PF	
C5076	F1H0J1050012	C CHIP 6.3V 1UF	
C5077	F1H0J1050012	C CHIP 6.3V 1UF	
C5078	F1H0J1050012	C CHIP 6.3V 1UF	
C5079	F1H0J1050012	C CHIP 6.3V 1UF	
C5080	F1H0J1050012	C CHIP 6.3V 1UF	
C5081	F1H0J1050012	C CHIP 6.3V 1UF	
C5082	F2H0J330A010	ELECTROLYTIC CHIP 6.3V 33UF	
C5083	F1H1H103A220	C CHIP 50V 0.01UF	
C5084	F1H1H103A220	C CHIP 50V 0.01UF	
C5085	F1H0J1050012	C CHIP 6.3V 1UF	
C5086	F1H0J1050012	C CHIP 6.3V 1UF	
C5087	F1H0J1050012	C CHIP 6.3V 1UF	
C5088	F1H1H103A220	C CHIP 50V 0.01UF	
C5089	F1H1H102A219	C CHIP 50V 1000PF	
C5090	F1H1H102A219	C CHIP 50V 1000PF	
C5091	F1H1C104A008	C CHIP 16V 0.1UF	
C5092	F1H1C104A008	C CHIP 16V 0.1UF	
C5093	F1H1H102A219	C CHIP 50V 1000PF	
C5094	F1H1H102A219	C CHIP 50V 1000PF	
C5095	F1H1C104A008	C CHIP 16V 0.1UF	
C5096	F1H1C104A008	C CHIP 16V 0.1UF	
C5097	F1H1H102A219	C CHIP 50V 1000PF	
C5098	F1H1H102A219	C CHIP 50V 1000PF	
C5099	F1H1C104A008	C CHIP 16V 0.1UF	
C5100	F1H1C104A008	C CHIP 16V 0.1UF	
C5101	F1H1H102A219	C CHIP 50V 1000PF	
C5102	F1H1C104A008	C CHIP 16V 0.1UF	
C5103	F1H1C104A008	C CHIP 16V 0.1UF	
C5104	F1H1C104A008	C CHIP 16V 0.1UF	
C5105	F1H1H102A219	C CHIP 50V 1000PF	
C5106	F1H1H102A219	C CHIP 50V 1000PF	
C5107	F1H1C104A008	C CHIP 16V 0.1UF	
C5108	F1H1C104A008	C CHIP 16V 0.1UF	
C5109	F1H1H102A219	C CHIP 50V 1000PF	
C5110	F1H1H102A219	C CHIP 50V 1000PF	
C5111	F1H1C104A008	C CHIP 16V 0.1UF	
C5112	F1H1C104A008	C CHIP 16V 0.1UF	
C5113	F1H1C104A008	C CHIP 16V 0.1UF	
C5114	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C5115	F1H1H103A220	C CHIP 50V 0.01UF	
C5117	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C5118	F1H1C104A008	C CHIP 16V 0.1UF	
C5119	F1H0J1050012	C CHIP 6.3V 1UF	
C5120	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C5121	F1H0J1050012	C CHIP 6.3V 1UF	
C5122	F1H1C104A008	C CHIP 16V 0.1UF	
C5123	F1H1C104A041	C CHIP 16V 0.1UF	
C5124	F1H1C104A041	C CHIP 16V 0.1UF	
C5125	F1H1C104A041	C CHIP 16V 0.1UF	
C5126	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C5128	F1H1C104A041	C CHIP 16V 0.1UF	
C5131	F1H1C104A041	C CHIP 16V 0.1UF	
C5132	F1H1C104A041	C CHIP 16V 0.1UF	
C5133	F1H1C104A041	C CHIP 16V 0.1UF	
C5134	F1H1C104A008	C CHIP 16V 0.1UF	
C5135	F1H1C104A041	C CHIP 16V 0.1UF	
C5136	F1H1C104A041	C CHIP 16V 0.1UF	
C5137	ECJ1VC1H120J	C CHIP 50V 12PF	
C5138	F1H0J1050012	C CHIP 6.3V 1UF	
C5139	F1H1H103A219	C CHIP 50V 0.01UF	
C5140	F1H0J1050012	C CHIP 6.3V 1UF	
C5141	F1H1H103A219	C CHIP 50V 0.01UF	
C5142	F1H1C104A041	C CHIP 16V 0.1UF	
C5143	F1H1H103A220	C CHIP 50V 0.01UF	
C5144	F1H1H103A220	C CHIP 50V 0.01UF	
C5145	F1H1H103A220	C CHIP 50V 0.01UF	
C5146	ECJ1VC1H102J	C CHIP 50V 1000PF	
C5147	F1H1C104A041	C CHIP 16V 0.1UF	
C5149	F1H1C104A041	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C5150	ECJ1VC1H102J	C CHIP 50V 1000PF	
C5151	F1H1C104A041	C CHIP 16V 0.1UF	
C5152	F1H1C104A041	C CHIP 16V 0.1UF	
C5154	F1H1C104A041	C CHIP 16V 0.1UF	
C5155	F1H1H103A220	C CHIP 50V 0.01UF	
C5156	F1H1C104A041	C CHIP 16V 0.1UF	
C5157	F1H1C104A041	C CHIP 16V 0.1UF	
C5158	F1H1C104A041	C CHIP 16V 0.1UF	
C5159	F1H1C104A041	C CHIP 16V 0.1UF	
C5160	F1H1C104A041	C CHIP 16V 0.1UF	
C5161	F1H1H103A220	C CHIP 50V 0.01UF	
C5162	F1H1C104A041	C CHIP 16V 0.1UF	
C5163	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C5164	F1H1C104A008	C CHIP 16V 0.1UF	
C5165	F1H1H103A219	C CHIP 50V 0.01UF	
C5166	ECJ1VB1C823K	C CHIP 16V 0.082UF	
C5167	F1H1C104A041	C CHIP 16V 0.1UF	
C5168	ECJ1VB0J684K	C CHIP 6.3V 0.68UF	
C5169	F1H1C104A008	C CHIP 16V 0.1UF	
C5170	F1H1C104A008	C CHIP 16V 0.1UF	
C5171	ECJ1VF0J225Z	C CHIP 6.3V 2.2UF	
C5172	F1H1C104A008	C CHIP 16V 0.1UF	
C5173	F1H1H471A737	C CHIP 50V 470PF	
C5175	ECJ1VF0J225Z	C CHIP 6.3V 2.2UF	
C5176	ECJ1VF0J225Z	C CHIP 6.3V 2.2UF	
C5177	F1H1C104A008	C CHIP 16V 0.1UF	
C5178	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C5179	F1H1C104A008	C CHIP 16V 0.1UF	
C5180	F1H1C104A008	C CHIP 16V 0.1UF	
C5181	F1H1C104A008	C CHIP 16V 0.1UF	
C5182	F1H1C104A041	C CHIP 16V 0.1UF	
C5183	F1H1C104A008	C CHIP 16V 0.1UF	
C5184	F1H1C104A008	C CHIP 16V 0.1UF	
C5185	F1H1C104A008	C CHIP 16V 0.1UF	
C5186	F1H0J1050012	C CHIP 6.3V 1UF	
C5187	F1H1H103A219	C CHIP 50V 0.01UF	
C5189	F2H1C100A009	ELECTROLYTIC CHIP 16V 10UF	
C5190	F1H1H103A219	C CHIP 50V 0.01UF	
C5192	F1H1C104A008	C CHIP 16V 0.1UF	
C5193	F1H1C104A008	C CHIP 16V 0.1UF	
C5194	F1H1H180A230	C CHIP 50V 18PF	
C5195	ECJ1VB0J475K	C CHIP 6.3V 4.7UF	
C5196	F1H1C104A008	C CHIP 16V 0.1UF	
C5197	ECJ1VC1H150J	C CHIP 50V 15PF	
C5198	F1H1C104A008	C CHIP 16V 0.1UF	
C5199	ECJ1VB0J475K	C CHIP 6.3V 4.7UF	
C5200	F1J0J1060004	C CHIP 6.3V 10UF	
C5201	F2H1C100A009	ELECTROLYTIC CHIP 16V 10UF	
C5202	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C5203	F1J0J1060004	C CHIP 6.3V 10UF	
C5204	ECJ1VB1E393K	C CHIP 25V 0.039UF	
C5205	F2H0G221A005	ELECTROLYTIC CHIP 4V 220UF	
C5206	EEFCD0G560R	ELECTROLYTIC CHIP 4V 56UF	
C5207	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C5208	F2H0G221A005	ELECTROLYTIC CHIP 4V 220UF	
C5209	F1H1H101A230	C CHIP 50V 100PF	
C5210	ERJ8GEYJ224V	MGF CHIP 1/8W 220K	
C5211	ERJ8GEYJ224V	MGF CHIP 1/8W 220K	
C5212	F1H0J1050012	C CHIP 6.3V 1UF	
C5213	F1H1H330A230	C CHIP 50V 33PF	
C5214	F1H1H330A230	C CHIP 50V 33PF	
C5273	F1H1C104A008	C CHIP 16V 0.1UF	
C5275	F1H1H330A230	C CHIP 50V 33PF	
C5363	F1H1C104A008	C CHIP 16V 0.1UF	
C5700	F1H1H102A219	C CHIP 50V 1000PF	
C5701	F1H1H102A219	C CHIP 50V 1000PF	
C5706	F1H1C104A041	C CHIP 16V 0.1UF	
C5707	F1H1C104A041	C CHIP 16V 0.1UF	
C5708	F1H1C104A041	C CHIP 16V 0.1UF	
C5709	F1H1C104A041	C CHIP 16V 0.1UF	
C5710	F1H1C104A041	C CHIP 16V 0.1UF	
C5711	F1H1C104A041	C CHIP 16V 0.1UF	
C5712	F1H1C104A008	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C5714	F1H1C104A008	C CHIP 16V 0.1UF	
C5715	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C5716	F1H1H104A731	C CHIP 50V 0.1UF	
C5717	F1H1H103A219	C CHIP 50V 0.01UF	
C5718	ECJ1VB1C224K	C CHIP 16V 0.22UF	
C5800	F1H1C104A008	C CHIP 16V 0.1UF	
C5801	F1H1C104A008	C CHIP 16V 0.1UF	
C5802	F1H1C104A008	C CHIP 16V 0.1UF	
C5803	F1H1C104A008	C CHIP 16V 0.1UF	
C5804	F1H1C104A008	C CHIP 16V 0.1UF (D,E,F,G,H)	
C5805	F1H1C104A008	C CHIP 16V 0.1UF	
C5806	F1H1C104A008	C CHIP 16V 0.1UF	
C5807	F1H1C104A008	C CHIP 16V 0.1UF	
C5808	F1H1C104A008	C CHIP 16V 0.1UF (D,E,F,G,H)	
C5809	F1H1C104A008	C CHIP 16V 0.1UF	
C5810	F1H1C104A008	C CHIP 16V 0.1UF	
C5811	F1H1C104A008	C CHIP 16V 0.1UF	
C5812	F1H1C104A008	C CHIP 16V 0.1UF	
C5813	F1H1C104A008	C CHIP 16V 0.1UF	
C5814	F1H1C104A008	C CHIP 16V 0.1UF	
C5815	F1H1C104A008	C CHIP 16V 0.1UF	
C5816	F1H1C104A008	C CHIP 16V 0.1UF (D,E,F,G,H)	
C5817	F1H1C104A008	C CHIP 16V 0.1UF	
C5818	F1H1C104A008	C CHIP 16V 0.1UF (D,E,F,G,H)	
C5819	F1H1C104A008	C CHIP 16V 0.1UF	
C5821	F1H1C104A008	C CHIP 16V 0.1UF	
C5823	F1H1C104A008	C CHIP 16V 0.1UF	
C5824	F1H1C104A008	C CHIP 16V 0.1UF	
C5825	F1H1C104A008	C CHIP 16V 0.1UF	
C5826	F1H1C104A008	C CHIP 16V 0.1UF	
C5828	F1H1C104A008	C CHIP 16V 0.1UF	
C5829	F1H1C104A008	C CHIP 16V 0.1UF	
C5830	F1H1C104A008	C CHIP 16V 0.1UF	
C5831	F1H1C104A008	C CHIP 16V 0.1UF	
C5832	F1H1C104A008	C CHIP 16V 0.1UF	
C5833	F1H1C104A008	C CHIP 16V 0.1UF	
C5834	F1H1A105A019	C CHIP 10V 1UF	
C5835	ECJ1VF1A105Z	C CHIP 10V 1UF (D,E,F,G,H)	
C5836	F1H1A105A019	C CHIP 10V 1UF	
C5837	F1H1A105A019	C CHIP 10V 1UF	
C5838	F1H1A105A019	C CHIP 10V 1UF	
C5839	F1H1A105A019	C CHIP 10V 1UF	
C5840	F1H1A105A019	C CHIP 10V 1UF	
C5841	F1H1A105A019	C CHIP 10V 1UF	
C5842	F1H1A105A019	C CHIP 10V 1UF	
C5843	F1H1A105A019	C CHIP 10V 1UF	
C5844	F1H1A105A019	C CHIP 10V 1UF	
C5845	F1H1A105A019	C CHIP 10V 1UF	
C5846	F1H1H103A220	C CHIP 50V 0.01UF	
C5848	F1H1H103A220	C CHIP 50V 0.01UF (D,E,F,G,H)	
C5850	F1H1H221A009	C CHIP 50V 220PF	
C5851	F1H1H181A230	C CHIP 50V 180PF	
C5852	F1H1H181A230	C CHIP 50V 180PF	
C5853	ECJ2FB0J106K	C CHIP 6.3V 10UF	
C5854	F1H1H103A219	C CHIP 50V 0.01UF	
C5855	F1H1H180A230	C CHIP 50V 18PF	
C5856	F1H1H180A230	C CHIP 50V 18PF	
C5857	F1H1H330A230	C CHIP 50V 33PF	
C5858	F1H1H330A230	C CHIP 50V 33PF	
C5859	F1H1A105A019	C CHIP 10V 1UF	
C5867	F2H1C470A009	ELECTROLYTIC CHIP 16V 47UF	
C5868	F2H1C470A009	ELECTROLYTIC CHIP 16V 47UF	
C5869	F2H1C470A009	ELECTROLYTIC CHIP 16V 47UF	
C5870	ECJ1VC1H271J	C CHIP 50V 270PF	
C5871	F1H1C104A008	C CHIP 16V 0.1UF	
C5872	F2H0J330A010	ELECTROLYTIC CHIP 6.3V 33UF (D,E,F,G,H)	
C5873	F2H0J330A010	ELECTROLYTIC CHIP 6.3V 33UF	
C5874	F1J0J1060004	C CHIP 6.3V 10UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C5875	F1J0J1060004	C CHIP 6.3V 10UF	
C5877	F1J0J1060004	C CHIP 6.3V 10UF	
C5878	F1J0J1060004	C CHIP 6.3V 10UF	
C5881	F2G0J101A032	ELECTROLYTIC CHIP 6.3V 100UF	
C5882	F2H1C100A009	ELECTROLYTIC CHIP 16V 10UF	
C5883	F1J0J4750005	C CHIP 6.3V 4.7UF	
C5884	F1J0J4750005	C CHIP 6.3V 4.7UF	
C6003	F1H1A105A019	C CHIP 10V 1UF	
C6004	F1H1C104A008	C CHIP 16V 0.1UF	
C6005	F1H1C104A008	C CHIP 16V 0.1UF	
C6006	F1H1C104A008	C CHIP 16V 0.1UF	
C6007	F1H1C104A008	C CHIP 16V 0.1UF	
C6009	F1H1C104A008	C CHIP 16V 0.1UF	
C6010	F1H0J1050012	C CHIP 6.3V 1UF	
C6011	F1H1C104A041	C CHIP 16V 0.1UF	
C6012	ECJ1VC1H102J	C CHIP 50V 1000PF	
C6013	F1H0J1050012	C CHIP 6.3V 1UF	
C6014	F1H1C104A041	C CHIP 16V 0.1UF	
C6015	F2H0G101A005	ELECTROLYTIC CHIP 4V 100UF	
C6016	F1H1C104A008	C CHIP 16V 0.1UF	
C6017	F1H1C104A008	C CHIP 16V 0.1UF	
C6018	F1H0J1050012	C CHIP 6.3V 1UF	
C6019	F1H1H103A219	C CHIP 50V 0.01UF	
C6020	F1H1C104A008	C CHIP 16V 0.1UF	
C6021	F1H1H103A219	C CHIP 50V 0.01UF	
C6023	F1H1C104A008	C CHIP 16V 0.1UF	
C6025	EEHHP0J470P	ELECTROLYTIC 6.3V 47UF	
C6026	F1H1A105A019	C CHIP 10V 1UF	
C6028	F1H1C104A008	C CHIP 16V 0.1UF	
C6029	F1H1C104A008	C CHIP 16V 0.1UF	
C6030	F1H1A105A019	C CHIP 10V 1UF	
C6031	F1H1C104A008	C CHIP 16V 0.1UF	
C6032	F1H1C104A008	C CHIP 16V 0.1UF	
C6033	F1H1C104A008	C CHIP 16V 0.1UF	
C6035	F1H1C104A041	C CHIP 16V 0.1UF	
C6037	F1H1H101A230	C CHIP 50V 100PF	
C6038	F1H1C104A008	C CHIP 16V 0.1UF	
C6039	F1H1H103A219	C CHIP 50V 0.01UF	
C6040	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C6041	ECJ2FB0J106M	C CHIP 6.3V 10UF	
C6042	F1H1C104A041	C CHIP 16V 0.1UF	
C6043	F1H1C104A041	C CHIP 16V 0.1UF	
C6044	F1H1C104A008	C CHIP 16V 0.1UF	
C6045	ECJ1VC1H101J	C CHIP 50V 100PF	
C6046	F1H1A105A019	C CHIP 10V 1UF	
C6048	F1H1C104A008	C CHIP 16V 0.1UF	
C6051	F1H1H102A219	C CHIP 50V 1000PF	
C6052	F1H1H102A219	C CHIP 50V 1000PF	
C6053	F1H1H102A219	C CHIP 50V 1000PF	
C6054	F1H1H102A219	C CHIP 50V 1000PF	
C6056	ECJ1VB0J475K	C CHIP 6.3V 4.7UF	
C6057	F1H1H102A219	C CHIP 50V 1000PF	
C6058	F1H1H102A219	C CHIP 50V 1000PF	
C6059	F1H1H471A737	C CHIP 50V 470PF	
C6060	F1H1H5610004	C CHIP 50V 560PF	
C6061	F1H0J1050012	C CHIP 6.3V 1UF	
C6062	F1H1A105A019	C CHIP 10V 1UF	
C6063	F1H1H102A219	C CHIP 50V 1000PF	
C6064	F1H1H102A219	C CHIP 50V 1000PF	
C6065	F1H1H102A219	C CHIP 50V 1000PF	
C6066	F1H1H102A219	C CHIP 50V 1000PF	
C6069	F1H1H102A219	C CHIP 50V 1000PF	
C6070	F1H1H102A219	C CHIP 50V 1000PF	
C6071	F1H1H102A219	C CHIP 50V 1000PF	
C6072	F1H1H102A219	C CHIP 50V 1000PF	
C6075	F1H1H102A219	C CHIP 50V 1000PF	
C6076	F1H1H102A219	C CHIP 50V 1000PF	
C6101	F1H1C104A041	C CHIP 16V 0.1UF	
C6103	F1H1C104A008	C CHIP 16V 0.1UF	
C6108	F1H1H102A219	C CHIP 50V 1000PF	
C6109	F1H1H102A219	C CHIP 50V 1000PF	
C6110	F1H1H102A219	C CHIP 50V 1000PF	
C6111	F1H1H102A219	C CHIP 50V 1000PF	

Ref. No.	Part No.	Part Name & Description	Remarks
C6112	FIH1H102A219	C CHIP 50V 1000PF	
C6113	FIH1H102A219	C CHIP 50V 1000PF	
C6114	FIH1H102A219	C CHIP 50V 1000PF	
C6115	ECJ1VB1C104K	C CHIP 16V 0.1UF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL3005	J0HAAB000036	FILTER FOR EMI / EMC (LCR FILTERS)	
FL3006	J0HAAB000036	FILTER FOR EMI / EMC (LCR FILTERS)	
FL3008	J0HAAB000036	FILTER FOR EMI / EMC (LCR FILTERS)	
FL3009	J0HAAB000036	FILTER FOR EMI / EMC (LCR FILTERS)	
FL3010	J0HAAB000036	FILTER FOR EMI / EMC (LCR FILTERS)	
FL3011	J0HAAB000036	FILTER FOR EMI / EMC (LCR FILTERS)	
FL3014	ELKE103FA	COIL CHIP EMI	
FL3015	ELKE103FA	COIL CHIP EMI	
FL3016	ELKE103FA	COIL CHIP EMI	
FL6000	ELKE103FA	COIL CHIP EMI	
FL6002	ELKE103FA	COIL CHIP EMI	
FL6003	ELKE103FA	COIL CHIP EMI	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L1100	G1C220ZA0128	COIL CHIP 22UH	
L1101	G1C220ZA0128	COIL CHIP 22UH	
L1104	G1C100M00023	COIL CHIP 10UH	
L1106	G1C100ZA0083	COIL CHIP 10UH	
L1108	G1C100ZA0083	COIL CHIP 10UH	
L5001	J0JHC0000078	EMI FILTER CHIP	
L5002	J0JHC0000078	EMI FILTER CHIP	
L5003	J0JCC0000241	FILTER FOR EMI / EMC	
L5004	J0JHC0000078	EMI FILTER CHIP	
L5005	J0JHC0000078	EMI FILTER CHIP	
L5006	J0JHC0000078	EMI FILTER CHIP	
L5007	J0JHC0000078	EMI FILTER CHIP	
L5008	J0JHC0000078	EMI FILTER CHIP	
L5009	J0JHC0000078	EMI FILTER CHIP	
L5010	J0JHC0000078	EMI FILTER CHIP	
L5012	J0JHC0000078	EMI FILTER CHIP	
L5013	J0JCC0000241	FILTER FOR EMI / EMC	
L5014	J0JCC0000241	FILTER FOR EMI / EMC	
L5015	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L5016	G1C101KA0055	COIL CHIP 100UH	
L5017	J0JHC0000078	EMI FILTER CHIP	
L5018	J0JHC0000068	EMI FILTER CHIP	
L5019	J0JHC0000068	EMI FILTER CHIP	
L5020	J0JHC0000068	EMI FILTER CHIP	
L5700	J0JBC0000080	FILTER FOR EMI / EMC	
L5701	J0JBC0000080	FILTER FOR EMI / EMC	
L5707	J0JBC0000014	BEAD INDUCTOR	
L5708	J0JBC0000014	BEAD INDUCTOR	
L5709	J0JBC0000080	FILTER FOR EMI / EMC	
L5710	G1C100KA0055	COIL CHIP 10UH	
L5800	ELJFA330KFB	COIL CHIP 33UH	
L5801	J0JHC0000078	EMI FILTER CHIP	
L5802	J0JHC0000078	EMI FILTER CHIP	
L5803	J0JHC0000078	EMI FILTER CHIP	
L5804	J0JHC0000078	EMI FILTER CHIP (D,E,F,G,H)	
L5805	J0JHC0000078	EMI FILTER CHIP (D,E,F,G,H)	
L5806	J0JHC0000078	EMI FILTER CHIP	
L5807	J0JHC0000078	EMI FILTER CHIP	
L5808	J0JHC0000078	EMI FILTER CHIP	
L5809	J0JHC0000078	EMI FILTER CHIP	
L5810	J0JHC0000078	EMI FILTER CHIP	
L5811	J0JHC0000078	EMI FILTER CHIP (D,E,F,G,H)	
L5812	J0JBC0000080	FILTER FOR EMI / EMC	
L5813	J0JBC0000080	FILTER FOR EMI / EMC	
L6001	J0JHC0000078	EMI FILTER CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
L6003	J0JHC0000078	EMI FILTER CHIP	
L6004	J0JHC0000078	EMI FILTER CHIP	
L6005	J0JHC0000078	EMI FILTER CHIP	
L6011	J0JHC0000078	EMI FILTER CHIP	
L6012	J0JBC0000080	FILTER FOR EMI / EMC	
L6013	J0JBC0000080	FILTER FOR EMI / EMC	
L6014	J0JBC0000080	FILTER FOR EMI / EMC	
L6015	J0JHC0000078	EMI FILTER CHIP	
L6022	J0JBC0000080	FILTER FOR EMI / EMC	
L6023	J0JBC0000080	FILTER FOR EMI / EMC	
L6024	J0JBC0000014	BEAD INDUCTOR	
L6025	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L6026	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L6027	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L6028	J0JBC0000014	BEAD INDUCTOR	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X5000	H0J270500087	CRYSTAL OSCILLATOR CHIP	
X5800	H0J283500016	CRYSTAL OSCILLATOR CHIP	
X6000	H2D400400012	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN3000	K1KA65BA0138	CONNECTOR 65P	
CN3001	K1FY115B0005	B-SUB JACK SOCKET	
CN5700	K1KA20B00153	CONNECTOR 20P	
CN5800	K1FA119E0002	HDMI JACK SOCKET (D,E,F,G,H)	
CN5801	K1FA119E0002	HDMI JACK SOCKET	
CN6000	K1KA14BA0051	CONNECTOR 14P	
CN6001	K1KA09BA0050	CONNECTOR 9P	
CN6002	K1KA03BA0270	CONNECTOR 3P	
CN6003	K1KBB0A00006	CONNECTOR 110P	
CN6004	K1KA05BA0047	CONNECTOR 5P	
CN6005	K1KA04BA0047	CONNECTOR 4P	
CN6008	K1KA08B00256	CONNECTOR 8P	

JACK

Ref. No.	Part No.	Part Name & Description	Remarks
JK5000	K2HC103B0063	STEREO MINI JACK SOCKET	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
701	LSSC0878	MAIN SHIELD CASE TOP	
702	LSSC0865	MAIN SHIELD CASE BOTTOM	

17.5.2. BASE P.C.B.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC3101	C1AB00002123	IC, LINEAR	
IC4002	AN15861A-VT	IC, LINEAR	

Ref. No.	Part No.	Part Name & Description	Remarks
IC4501	C0FBAK000019	IC, LINEAR	
IC4503	C0JBAB0000620	IC, LOGIC	E.S.D.
IC4504	C1AB00002568	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q3101	2SB0709ARL	TRANSISTOR SI PNP CHIP	
Q3102	2SB0709ARL	TRANSISTOR SI PNP CHIP	
Q3103	2SB0709ARL	TRANSISTOR SI PNP CHIP	
Q3107	UNR521400L	TRANSISTOR SI NPN CHIP	
Q3501	2SB0709ARL	TRANSISTOR SI PNP CHIP	
Q3502	2SD0601ARL	TRANSISTOR SI NPN CHIP	
Q3503	2SD0601ARL	TRANSISTOR SI NPN CHIP	
Q4002	2SD0601ARL	TRANSISTOR SI NPN CHIP	
Q4003	2SD0601ARL	TRANSISTOR SI NPN CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R1273	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3101	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3102	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3103	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3105	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R3106	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R3107	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3108	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3109	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3110	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3111	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3112	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3116	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R3117	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R3118	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3120	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3122	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3124	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R3128	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R3132	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R3136	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3137	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3138	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3139	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3140	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3143	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3144	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3145	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3146	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3147	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3148	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3149	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3150	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3151	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3152	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3153	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3154	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3155	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3156	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3157	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3161	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3162	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3163	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3164	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3170	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3171	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3175	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3176	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3177	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3178	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3179	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3180	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3197	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3501	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R3502	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3503	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3504	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3505	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3506	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3507	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3508	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3509	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3510	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3511	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3512	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3516	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3517	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3518	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3519	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3520	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3521	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3522	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3523	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3524	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3525	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3528	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R3529	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R3530	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R3531	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R3532	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R3533	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R3534	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3535	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3536	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3537	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3538	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3539	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3543	ERJ3GEYJ184V	MGF CHIP 1/16W 180K (D,E,F,G,H)	
R3544	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3545	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3546	ERJ3GEYJ184V	MGF CHIP 1/16W 180K (D,E,F,G,H)	
R3551	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3552	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R3553	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R3554	ERJ3GEYJ274V	MGF CHIP 1/16W 270K	
R3555	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3556	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3558	ERJ6ENF75R0V	MGF CHIP 1/10W 75	
R3560	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3561	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R3562	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R3563	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R3564	ERJ6GEYJ184V	MGF CHIP 1/10W 180K	
R3565	ERJ6GEYJ184V	MGF CHIP 1/10W 180K	
R3566	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4001	ERJ3GEYJ102V	MGF CHIP 1/16W 1K (D,E,F,G,H)	
R4002	ERJ3GEYJ102V	MGF CHIP 1/16W 1K (D,E,F,G,H)	
R4003	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4004	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4005	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4006	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4007	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4008	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4010	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4011	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4012	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4013	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4014	ERJ3GEYJ681V	MGF CHIP 1/16W 680	
R4015	ERJ3GEYJ681V	MGF CHIP 1/16W 680	
R4031	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R4034	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R4035	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R4036	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4037	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	

Ref. No.	Part No.	Part Name & Description	Remarks
R4041	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4042	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4043	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4044	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4045	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4046	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4047	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R4048	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R4049	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R4050	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R4051	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R4052	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R4053	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R4054	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4055	ERJ3GEYJ681V	MGF CHIP 1/16W 680	
R4056	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4057	ERJ3GEYJ681V	MGF CHIP 1/16W 680	
R4058	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4059	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4060	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R4063	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R4501	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R4502	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R4503	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R4504	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R4505	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R4506	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R4507	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R4508	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R4509	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R4510	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R4512	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R4513	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R4514	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4515	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4516	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R4517	ERJ14YJ100U	MGF CHIP 1/4W 10	
R4518	ERJ14YJ100U	MGF CHIP 1/4W 10	
R4519	ERJ14YJ100U	MGF CHIP 1/4W 10	
R4520	ERJ14YJ100U	MGF CHIP 1/4W 10	
R4525	ERJ14YJ6R2U	MGF CHIP 1/4W 6.2	
R4526	ERJ14YJ6R2U	MGF CHIP 1/4W 6.2	
R4530	ERJ14YJ6R2U	MGF CHIP 1/4W 6.2	
R4531	ERJ14YJ6R2U	MGF CHIP 1/4W 6.2	
R4534	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
JS3101	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
JS3102	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
JS3111	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
JS3112	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
JS3115	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS3116	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C3101	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3102	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3103	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3104	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3105	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3106	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3107	F1H1A105A025	C CHIP 10V 1UF	
C3108	F1H1A105A025	C CHIP 10V 1UF	
C3109	F1H1C104A008	C CHIP 16V 0.1UF	
C3111	F1H1C104A008	C CHIP 16V 0.1UF	
C3113	F1H1C104A008	C CHIP 16V 0.1UF	
C3114	F1H1C104A008	C CHIP 16V 0.1UF	
C3115	F1H1C104A008	C CHIP 16V 0.1UF	
C3116	F1H1C104A008	C CHIP 16V 0.1UF	
C3123	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3124	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3125	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3126	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3127	ECJ1VF1C105Z	C CHIP 16V 1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C3128	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3129	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3131	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3132	ECJ3YB1A106M	C CHIP 10V 10UF	
C3133	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3134	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3135	F2A1C2210038	ELECTROLYTIC 16V 220UF	
C3137	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3138	ECA1HM220B	ELECTROLYTIC 50V 22UF	
C3139	ECJ3YB1A106M	C CHIP 10V 10UF	
C3140	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3141	ECJ1VC1H080C	C CHIP 50V 8PF	
C3142	ECJ1VC1H080C	C CHIP 50V 8PF	
C3143	ECJ1VC1H080C	C CHIP 50V 8PF	
C3147	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3148	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3501	F1H1A105A025	C CHIP 10V 1UF	
C3502	F1H1A105A025	C CHIP 10V 1UF	
C3503	F1H1A105A025	C CHIP 10V 1UF	
C3504	F1H1A105A025	C CHIP 10V 1UF	
C3505	F1H1A105A025	C CHIP 10V 1UF	
C3506	F1H1A105A025	C CHIP 10V 1UF	
C3507	F1H1A105A025	C CHIP 10V 1UF	
C3508	F1H1A105A025	C CHIP 10V 1UF	
C3509	F1H1A105A025	C CHIP 10V 1UF	
C3510	F1H1A105A025	C CHIP 10V 1UF	
C3511	F1H1A105A025	C CHIP 10V 1UF	
C3512	F1H1A105A025	C CHIP 10V 1UF	
C3513	F1H1A105A025	C CHIP 10V 1UF	
C3514	F1H1A105A025	C CHIP 10V 1UF	
C3515	F1H1A105A025	C CHIP 10V 1UF	
C3516	F1H1A105A025	C CHIP 10V 1UF	
C3517	F1H1A105A025	C CHIP 10V 1UF	
C3518	F1H1A105A025	C CHIP 10V 1UF	
C3528	F1H1A105A025	C CHIP 10V 1UF (D,E,F,G,H)	
C3529	F1H1A105A025	C CHIP 10V 1UF (D,E,F,G,H)	
C3530	F1H1A105A025	C CHIP 10V 1UF	
C3531	F1H1A105A025	C CHIP 10V 1UF	
C3532	ECA1AM102B	ELECTROLYTIC 10V 1000UF	
C3547	ECJ1VF1C105Z	C CHIP 16V 1UF	
C3548	ECJ2FB1A225K	C CHIP 10V 2.2UF	
C3549	ECJ2FB1A225K	C CHIP 10V 2.2UF	
C4005	F1H1A105A025	C CHIP 10V 1UF	
C4006	F1H1A105A025	C CHIP 10V 1UF	
C4007	F1H1A105A025	C CHIP 10V 1UF	
C4008	F1H1A105A025	C CHIP 10V 1UF	
C4009	F1H1A105A025	C CHIP 10V 1UF	
C4010	F1H1A105A025	C CHIP 10V 1UF	
C4011	F1H1A105A025	C CHIP 10V 1UF	
C4012	F1H1A105A025	C CHIP 10V 1UF	
C4013	ECJ1VF1C105Z	C CHIP 16V 1UF (A,B,C)	
C4014	ECJ1VF1C105Z	C CHIP 16V 1UF (A,B,C)	
C4033	ECEA1CKA101	ELECTROLYTIC 16V 100UF	
C4034	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4035	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4036	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4037	ECEA1CKA220	ELECTROLYTIC 16V 22UF	
C4038	ECEA1CKA100	ELECTROLYTIC 16V 10UF	
C4039	ECJ1VF1C105Z	C CHIP 16V 1UF	
C4040	ECJ1VF1C105Z	C CHIP 16V 1UF	
C4041	F1H1C104A008	C CHIP 16V 0.1UF	
C4042	F1H1C104A008	C CHIP 16V 0.1UF	
C4045	ECJ1VF1C105Z	C CHIP 16V 1UF	
C4501	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4502	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4503	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4504	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4505	ECEA1EKA4R7	ELECTROLYTIC 25V 4.7UF	
C4506	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4507	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4508	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4509	ECJ2VF1H104Z	C CHIP 50V 0.1UF	
C4510	ECJ1VC1H100C	C CHIP 50V 10PF	

Ref. No.	Part No.	Part Name & Description	Remarks
C4511	ECJ1VC1H100C	C CHIP 50V 10PF	
C4512	F1K1H1050002	C CHIP 50V 1UF	
C4513	F1K1H1050002	C CHIP 50V 1UF	
C4514	F1K1H1050002	C CHIP 50V 1UF	
C4515	F1K1H1050002	C CHIP 50V 1UF	
C4516	F1K1H1050002	C CHIP 50V 1UF	
C4517	F1K1H1050002	C CHIP 50V 1UF	
C4518	F1K1H1050002	C CHIP 50V 1UF	
C4519	ECJ1VC1H221J	C CHIP 50V 220PF	
C4520	ECJ1VB1H122K	C CHIP 50V 1200PF	
C4521	ECJ2VF1C105Z	C CHIP 16V 1UF	
C4522	ECJ2VF1C105Z	C CHIP 16V 1UF	
C4523	ECEA0JKA220	ELECTROLYTIC 6.3V 22UF	
C4524	ECJ1VB1H681K	C CHIP 50V 680PF	
C4525	ECJ1VB1H681K	C CHIP 50V 680PF	
C4526	ECJ1VB1H681K	C CHIP 50V 680PF	
C4527	ECJ1VB1H681K	C CHIP 50V 680PF	
C4528	ECQV1H684JL3	POLYESTER 50V 0.68UF	
C4529	ECQV1H684JL3	POLYESTER 50V 0.68UF	
C4532	ECQV1H684JL3	POLYESTER 50V 0.68UF	
C4533	ECQV1H684JL3	POLYESTER 50V 0.68UF	
C4534	ECJ1VB1H102K	C CHIP 50V 1000PF	
C4535	ECJ1VB1H102K	C CHIP 50V 1000PF	
C4536	ECJ1VB1H102K	C CHIP 50V 1000PF	
C4537	F1K1H1050002	C CHIP 50V 1UF	
C4538	F2A1H102A531	ELECTROLYTIC 50V 1000UF	
C4539	F1H1H104A748	C CHIP 50V 0.1UF	
C4540	F1H1H104A748	C CHIP 50V 0.1UF	
C4541	F1H1H104A748	C CHIP 50V 0.1UF	
C4542	F1H1H104A748	C CHIP 50V 0.1UF	
C4544	F1K1H1050002	C CHIP 50V 1UF	
C4545	F1H1H104A748	C CHIP 50V 0.1UF	
C4546	F1H1H104A748	C CHIP 50V 0.1UF	
C4547	F1H1H104A748	C CHIP 50V 0.1UF	
C4548	F1H1H104A748	C CHIP 50V 0.1UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L3101	J0JHC0000031	EMI FILTER CHIP	
L3102	J0JHC0000031	EMI FILTER CHIP	
L4004	J0JHC0000078	EMI FILTER CHIP	
L4501	J0JJC0000003	COIL	
L4502	J0JJC0000003	COIL	
L4504	G0A220ZA0030	COIL 22UH	
L4505	G0A220ZA0030	COIL 22UH	
L4506	G0A220ZA0030	COIL 22UH	
L4507	G0A220ZA0030	COIL 22UH	
L4508	G0C101JA0055	COIL 100UH	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X4501	H0A122500004	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN3101	LSJA0586	CONNECTOR CABLE W/PLUG	
CN3102	LSJA0585	CONNECTOR CABLE W/PLUG	
CN3103	K1KB65A00002	CONNECTOR 65P	
CN4501	K1KA02A00735	CONNECTOR 2P	
CN4502	LSJA0600	CONNECTOR CABLE W/PLUG	

JACKS

Ref. No.	Part No.	Part Name & Description	Remarks
JK3501	K1U930B00001	AUDIO/VIDEO/S-VIDEO JACK SOCKET	
JK3502	K2HA920B0001	AUDIO/VIDEO JACK SOCKET	
JK3503	K2HA4YYB0001	HDMI AUDIO JACK SOCKET (D,E,F,G,H)	
JK3504	K2HA2YYB0003	HDMI AUDIO JACK SOCKET (A,B,C)	

17.5.3. POWER SWITCH P.C.B.

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q6802	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or	BLADCF000063	TRANSISTOR SI PNP CHIP	
Q6802	BLADCF000075	TRANSISTOR SI PNP CHIP	
Q6803	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or	BLADCF000063	TRANSISTOR SI PNP CHIP	
Q6803	BLADCF000075	TRANSISTOR SI PNP CHIP	
Q6804	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or	BLABCF000020	TRANSISTOR SI NPN CHIP	
Q6804	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or	BLABCF000020	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D6801	B3AGA0000072	LIGHT EMITTING DIODE GREEN	
D6802	B3AAA0000538	LIGHT EMITTING DIODE RED	
D6803	B3AAA0000538	LIGHT EMITTING DIODE RED	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R6801	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6802	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6803	ERJ3GEYJ181V	MGF CHIP 1/16W 180	
R6804	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6805	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6806	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6807	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6808	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6809	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6810	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6811	ERJ3GEYJ471V	MGF CHIP 1/16W 470	
R6812	ERJ3GEYJ471V	MGF CHIP 1/16W 470	

PIN HEADER

Ref. No.	Part No.	Part Name & Description	Remarks
CN6801	K1KA08BA0061	CONNECTOR 8P	

SWITCH

Ref. No.	Part No.	Part Name & Description	Remarks
SW6801	EVQ11G05R	SWITCH PUSH	

17.5.4. FRONT JACK/OPERATION P.C.B.

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R3901	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R3902	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R3903	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R3904	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6701	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6702	ERJ3GEYJ122V	MGF CHIP 1/16W 1.2K	
R6703	ERJ3GEYJ152V	MGF CHIP 1/16W 1.5K	
R6704	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R6705	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R6706	ERJ3GEYJ183V	MGF CHIP 1/16W 18K	
R6707	ERJ3GEYJ122V	MGF CHIP 1/16W 1.2K	

CAPACITOR

Ref. No.	Part No.	Part Name & Description	Remarks
C6701	ECEA0JKS470I	ELECTROLYTIC 6.3V 47UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L3901	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L3902	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L3903	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L3904	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L3905	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L6701	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN3901	K1KA12BA0062	CONNECTOR 12P	
CN6701	K1KA07BA0061	CONNECTOR 7P	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
SW6702	EVQ11G05R	SWITCH PUSH	
SW6703	EVQ11G05R	SWITCH PUSH	
SW6704	EVQ11G05R	SWITCH PUSH	
SW6705	EVQ11G05R	SWITCH PUSH	
SW6706	EVQ11G05R	SWITCH PUSH	
SW6707	EVQ11G05R	SWITCH PUSH	
SW6708	EVQ11G05R	SWITCH PUSH	

JACK

Ref. No.	Part No.	Part Name & Description	Remarks
JK3901	K1U412A00008	AUDIO/VIDEO/S-VIDEO JACK SOCKET	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
RM6701	PNA4618M14VT	INFRARED RECEIVER UNIT	

17.5.5. SD CARD P.C.B.

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R9001	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9002	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9003	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9004	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9005	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9006	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9007	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9008	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9069	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9070	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9071	ERJ3GEYJ181V	MGF CHIP 1/16W 180	
R9072	ERJ3GEYJ181V	MGF CHIP 1/16W 180	
R9073	ERJ3GEYJ181V	MGF CHIP 1/16W 180	
R9074	ERJ3GEYJ181V	MGF CHIP 1/16W 180	
R9075	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9076	ERJ3GEYJ181V	MGF CHIP 1/16W 180	
R9078	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C9016	ECEA0JKA470	ELECTROLYTIC 6.3V 47UF	
C9021	FIH1C104A008	C CHIP 16V 0.1UF	

COIL

Ref. No.	Part No.	Part Name & Description	Remarks
L9003	ERJ6GEY0R00V	MGF CHIP 1/10W 0	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN9003	LSJA0587	CONNECTOR CABLE W/PLUG	
CN9005	K1NA09E00078	SD UNIT	

17.5.6. THERMISTOR 2 P.C.B.

RESISTOR

Ref. No.	Part No.	Part Name & Description	Remarks
R2821	D4CE31330001	THERMISTOR	△ PSEC

PIN HEADER

Ref. No.	Part No.	Part Name & Description	Remarks
P2821	K1KA02AA0300	CONNECTOR 2P	PSEC

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
762	LSJA0533	CONNECTOR CABLE W/PLUG	PSEC

17.5.7. COVER SWITCH P.C.B.

PIN HEADER

Ref. No.	Part No.	Part Name & Description	Remarks
P2912	LSJA0551	CONNECTOR CABLE W/PLUG	PSEC

SWITCH


Ref. No.	Part No.	Part Name & Description	Remarks
SW2911	K0L1BA000114	SWITCH	PSEC

17.5.8. ELECTRICAL PARTS LOCATED ON CHASSIS

FUSE & PROTECTOR

Ref. No.	Part No.	Part Name & Description	Remarks
F001	LSJA0583	THERMAL FUSE UNIT	△ PSEC

1 PROJECTION SECTION


IMPORTANT SAFETY NOTICE
COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

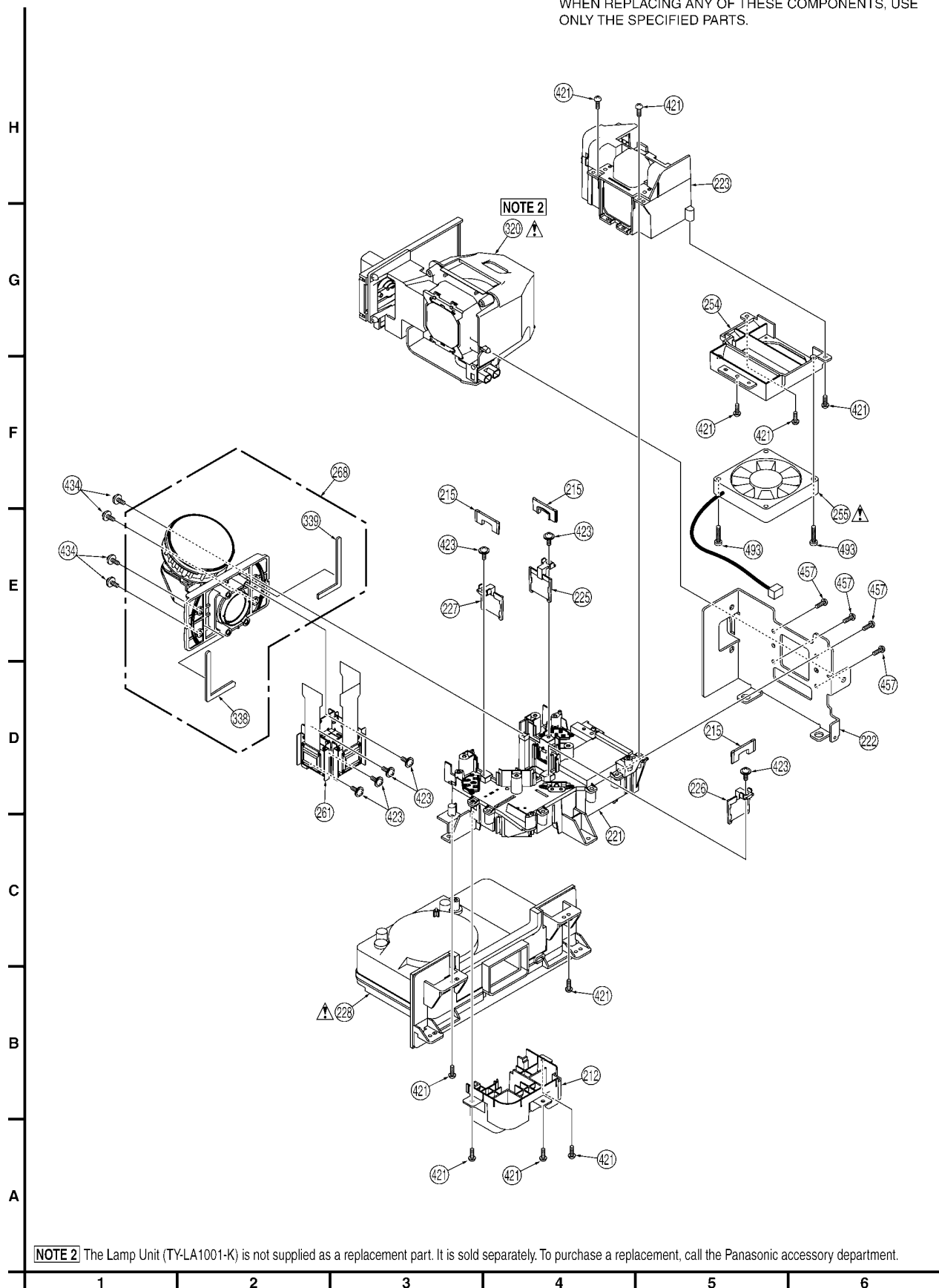


18.2. OPTICAL UNIT SECTION

② OPTICAL UNIT SECTION

IMPORTANT SAFETY NOTICE


COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

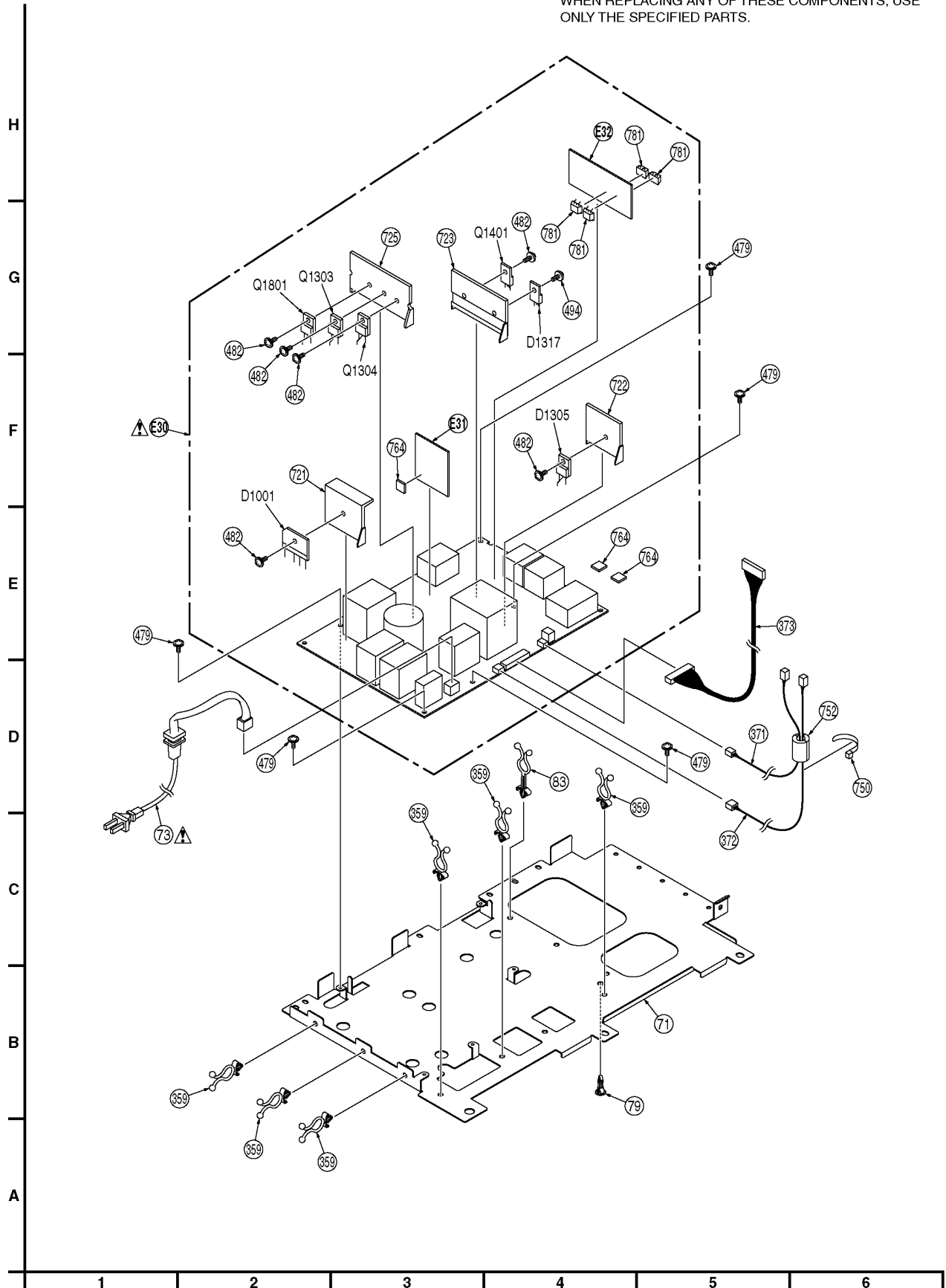


18.4. POWER UNIT SECTION

4 POWER UNIT SECTION

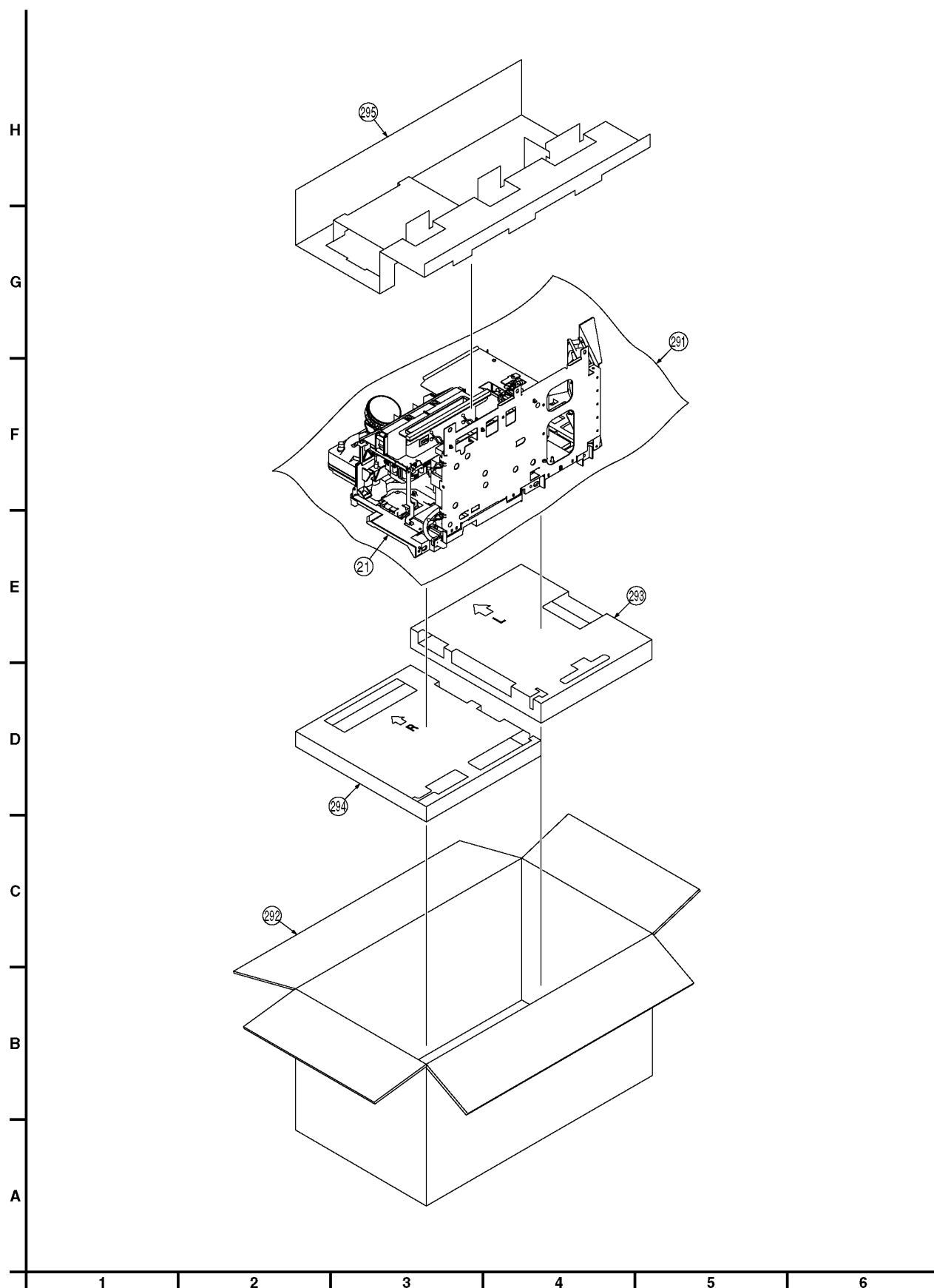
IMPORTANT SAFETY NOTICE

COMPONENTS IDENTIFIED BY THE SIGN  HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.



18.5. PACKING PARTS SECTION

5 PACKING PARTS SECTION



19 Replacement Parts List (Projection Section)

BEFORE REPLACING PARTS, READ THE FOLLOWING:

19.1. REPLACEMENT NOTES

19.1.1. General Notes

1. Use only original replacement parts:
To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list.
2. **IMPORTANT SAFETY NOTICE**
Components identified by the sign \triangle have special characteristics important for safety. When replacing any of these components, use only the specified parts.
3. **SPECIAL NOTE**
All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.
4. Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
5. Parts different in shape or size may be used. However, only interchangeable parts will be supplied as service replacement parts.
6. Definition of Parts supplier:
a. All parts are supplied from PSEC.
7. Item numbers with capital letter E (Example: E10, E20,...) in the Ref. No. column are shown in the exploded views.
8. Parts whose Ref. Nos. are the same are interchangeable as replacement parts. Any of these parts may be ordered and used as a replacement part.

19.1.2. Mechanical Replacement Notes

1. Section No. of parts shown in Exploded Views are indicated in the Remarks column.
2. **Abbreviation**
RTL: Retention Time Limited
This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.
3. After replacing the LCD/Prism Unit (Ref. No. 261), be sure to perform the following adjustment in order.
a. Full Mirror Adjustment
b. Polarizer Adjustment
c. VCOM Adjustment
d. White Balance Adjustment
For above adjustments, refer to "Adjustment Procedures 2."
4. After replacing the Polarizer Red Unit (Ref. No. 225), the Polarizer Green Unit (Ref. No. 226), or the Polarizer Blue Unit (Ref. No. 227), be sure to perform the "POLARIZER ADJUSTMENT" in Adjustment Procedures 2 section.

19.1.3. Electrical Replacement Notes

1. Unless otherwise specified;
All resistors are in Ω , K = 1,000 Ω , M = 1,000 k Ω .
2. **Abbreviation**
RTL: Retention Time Limited
This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.
NR: Non Repairable Board Ass'y
MGF CHIP: Metal Glaze Film Chip
C CHIP: Ceramic Chip
COMPLX CMP: Complex Component
W FLMPRF: Wirewound Flameproof
C.B.A.: Circuit Board Assembly
P.C.B.: Printed Circuit Board
E.S.D.: Electrostatically Sensitive Devices
3. When replacing 0 Ω resistor, a wire can be substituted for it.
4. Parts with mark "CSP" in the Remarks column are CSP (Chip Size Package) IC.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

19.2. MECHANICAL REPLACEMENT PARTS LIST

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
-----	A
-----	B
-----	C
-----	D
-----	E
PT-52LCX66-K	F
PT-56LCX16-K	G
PT-61LCX66-K	H

Definition of Parts supplier:

1. All parts are supplied from PSEC.

MECHANICAL REPLACEMENT PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
2	LSMA0926	FAN MOUNT METAL	1
14	LSXA0833	LVDS CABLE	1
21	LSXA0771-HB	PROJECTION UNIT (A,B,D,E,F,G)	1,5 RTL
21	LSXA0827-HB	PROJECTION UNIT (C,H)	1,5 RTL
24	L6FAYYYH0015	FAN 3	1 △
71	LSMA0922	POWER P.C.B. MOUNT METAL	4
73	LSJA0531	AC CORD W/PLUG	4 △
79	KGLS-12RT	SPACER	4
83	TMM5439-1	CLAMPER	1,4
201	LSMP0515	ENGINE FRAME	1
202	LSMA0942	LAMP TOP PANEL	1
203	LSXA0657	TOP DUCT 2 UNIT	1
204	LSSC0883	LCD DRIVE GROUNDING PLATE E,STEEL	1
205	LSSC0881	LCD DRIVE GROUNDING PLATE T,STEEL	1
206	LSJA0603	CONNECTOR CABLE W/PLUG	1
207	LSJA0599	CONNECTOR CABLE W/PLUG	1
208	LSSC0864	ENGINE FRAME PLATE R,STEEL	1
209	LSMF0299	SEALING TAPE 4	1
212	LSXA0601	DUCT UNIT	2
213	LSXA0648	TOP DUCT 1 UNIT	1
214	LSMP0478	FILTER CASE UNIT	1
215	LSXA0609	JOINT PIECE UNIT	2
216	LSJA0597	CONNECTOR CABLE W/PLUG	1
217	LSGQ0211	AL TAPE	1
219	J0KE00000059	FERRITE CORE	1
220	J0KA00000044	FILTER FOR EMI / EMC (CORES)	1
221	LSXA0753	OPTICAL BLOCK UNIT	2
222	LSMA0941	LAMP HOLDER PLATE,STEEL	2
223	LSXA0757	OPTICAL IRIS UNIT	2,3
225	LSXA0758	POLARIZER RED UNIT	2
226	LSXA0759	POLARIZER GREEN UNIT	2
227	LSXA0760	POLARIZER BLUE UNIT	2
228	LSMP0534	FAN CASE	2 △
229	CS-7U	CLIP	1
230	LSSC0802	LCD SHIELD	1
231	LSDL0313	INTEGRATOR 1	3
232	LSDL0315	P/S CONVERTER	3
238	LSDL0323	CONDENSER LENS	3
250	LSDL0314	INTEGRATOR 2	3
251	LSDL0350	UV/IR FILTER	3
254	LSMP0530	LAMP DUCT	2
255	L6FAYYYH0014	FAN 2	2 △
256	LSMF0055	CUSHION,URETHANE	3
257	LSMF0068	CUSHION,URETHANE	3
258	LSMF0522	CUSHION,URETHANE	3
261	LSVQ0104	LCD/PRISM UNIT	2

Ref. No.	Part No.	Part Name & Description	Remarks
263	LSMA0949	AL MASK	3
264	LSXA0754	IRIS TOP COVER UNIT	3
265	LSXA0755	IRIS BOTTOM COVER UNIT *Refer to "Replacement Note for Iris Bottom Cover Unit" in Disassembly and Assembly Instructions.	3
266	LSXA0756	IRIS UNIT	3
268	LSXA0740	PROJECTION LENS	2
269	LSMF0387	TOP DUCT 1 SPONGE 3	1
271	LSMA0940	LAMP SIDE PANEL	1
272	LSJA0604	CONNECTOR CABLE W/PLUG	3
273	LSQL2185	FUSE LABEL	1
274	LSSC0869	ENGINE FRAME PLATE S,STEEL	1
275	LSMF0525	IRIS SHEET	3
276	LSMA0938	IRIS MECHANISM UNIT	3
291	LSPF0199	BAG,POLYETHYLENE	5
292	LSPG2208	PACKING CASE,PAPER (A,B,D,E,F,G)	5
292	LSPG2270	PACKING CASE,PAPER (C,H)	5
293	LSPN0701	BOTTOM PAD B	5
294	LSPN0700	BOTTOM PAD A	5
295	LSPN0702	TOP PAD	5
334	LSMF0385	TOP DUCT 1 SPONGE 1	1
335	LSMF0386	TOP DUCT 1 SPONGE 2	1
336	LSMF0264	TOP DUCT 1 SPONGE 4	1
337	LSMF0388	TOP DUCT 1 SPONGE 5	1
338	LSMF0333	PROJECTION LENS SPONGE 1	2
339	LSMF0334	PROJECTION LENS SPONGE 2	2
340	LSMF0406	TOP DUCT 1 SPONGE 6	1
359	LSGQ0176	CLAMPER	4
371	LSJA0596	CONNECTOR CABLE W/PLUG	4
372	LSJA0598	CONNECTOR CABLE W/PLUG	4
373	LSJA0595	CONNECTOR CABLE W/PLUG	4
402	XTV3+8JFJ	TAPPING SCREW,STEEL	1
421	XTV3+8GFJ	TAPPING SCREW,STEEL	1,2,3
423	XYN26+K8FJK	SCREW W/WASHER,STEEL	2
434	XYN3+F10FJ	SCREW W/WASHER,STEEL	2,3
451	XTW3+8QFJ	TAPPING SCREW,STEEL	1
456	XTV3+6FFJ	TAPPING SCREW,STEEL	1
457	XTS3+10GFJ	TAPPING SCREW,STEEL	2
475	XSN3+20FJ	SCREW,STEEL	1
479	XYE3+FJ8FJ	SCREW W/WASHER,STEEL	1,4
482	XYN3+J8FJ	SCREW W/WASHER,STEEL	4
491	XTV3+10GFJ	TAPPING SCREW,STEEL	1
492	XTV3+30JFJ	TAPPING SCREW,STEEL	1
493	XTV3+16GFJ	TAPPING SCREW,STEEL	2
494	XYN3+J10FJ	SCREW,W/WASHER,STEEL	4
495	XYN2+F5FJ	SCREW W/WASHER,STEEL	3
721	LSEK0721	HEAT SINK UNIT	4
722	LSEK0723	HEAT SINK UNIT	4
723	LSEK0724	HEAT SINK UNIT	4
725	LSSC0917	HEAT SINK	4
731	LSSC0884	IRIS SHIELD CASE TOP,STEEL	1
732	LSSC0885	IRIS SHIELD CASE BOTTOM,STEEL	1
733	LSSC0880	LCD DRIVE SHIELD CASE TOP,STEEL	1
734	LSSC0879	LCD DRIVE SHIELD CASE BOTTOM,STEEL	1
750	VZFS0006	CLAMPER	1,4
752	LSLQ0307	FERRITE CORE	1,4
762	LSJA0533	CONNECTOR CABLE W/PLUG	1
763	LSMG0141	THERCOON SHEET	1
764	VMTS0059	CUSHION,RUBBER	4
766	LSMG0173	THERCOON SHEET	1
781	B1DFHM000005	TRANSISTOR FET	4
E30	LSEP1206A1	POWER P.C.B.	4 RTL △
E31	LSEP1207A1	POWER CONTROL 1 P.C.B. NR	4
E32	LSEP1208A1	POWER CONTROL 2 P.C.B. NR	4
E110	LSXA0772	LCD DRIVE P.C.B.	1 RTL
E130	LSEP3137B	THERMISTOR 2 P.C.B.	1 RTL
E140	LSEP3160A	COVER SWITCH P.C.B.	1 RTL
E150	LSXA0773	IRIS P.C.B.	1 RTL
E160	LSEP3215A	HALL-S P.C.B.	3 RTL

19.3. OPTIONAL ACCESSORY REPLACEMENT PARTS LIST

19.3.1. LAMP UNIT

Ref. No.2	Part No.	Part Name & Description	Remarks
320	TY-LA1001-K	LAMP UNIT	2 Δ NOTE

NOTE:

The Lamp Unit (TY-LA1001-K) is not supplied as a replacement part. It is sold separately. To purchase a replacement, call the Panasonic accessory department.

19.4. ELECTRICAL REPLACEMENT PARTS LIST

Definition of Parts supplier:

1. All parts are supplied from PSEC.

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E30	LSEP1206A1	POWER P.C.B.	Δ E.S.D. RTL
E31	LSEP1207A1	POWER CONTROL 1 P.C.B. NR	
E32	LSEP1208A1	POWER CONTROL 2 P.C.B. NR	
E110	LSXA0772	LCD DRIVE P.C.B.	E.S.D. RTL
E130	LSEP3137B	THERMISTOR 2 P.C.B.	RTL
E140	LSEP3160A	COVER SWITCH P.C.B.	RTL
E150	LSXA0773	IRIS P.C.B.	E.S.D. RTL
E160	LSEP3215A	HALL-S P.C.B.	RTL

19.4.1. POWER P.C.B.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC1002	C0DAEMB00004	IC, LINEAR	
IC1003	C0DAEMB00004	IC, LINEAR	
IC1401	CNC1S101RLL1	IC, LINEAR	Δ
IC1404	CNC1S101RLL1	IC, LINEAR	Δ
IC1406	CNC1S101RLL1	IC, LINEAR	Δ
IC1407	CNC1S101RLL1	IC, LINEAR	Δ
IC1408	C0DAGJC00001	IC, LINEAR	
IC1409	C0DAGDC00001	IC, LINEAR	
IC1831	C0DAZZZ000021	IC, LINEAR	
IC1901	CNC1S101RLL1	IC, LINEAR	Δ
IC1931	MIP2C20MP1KT	IC, LINEAR	Δ
IC1932	C0DAEMB00004	IC, LINEAR	
IC1933	C0JBAZ002456	IC, LOGIC	E.S.D.
IC1934	C0JBAZ002456	IC, LOGIC	E.S.D.
IC1935	C0JBAC000421	IC, LOGIC	E.S.D.
IC1937	C0CBADE00037	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q1303	B1DAGQ000013	TRANSISTOR FET	Δ
Q1304	B1DAGQ000013	TRANSISTOR FET	Δ
Q1305	B1HFCFA00021	TRANSISTOR ARRAY	
Q1401	B1CARM000002	TRANSISTOR FET	
Q1402	B1ADPC000003	TRANSISTOR SI PNP CHIP	
Q1503	B1DEFM000004	TRANSISTOR FET	
Q1505	B1CEJQ000002	TRANSISTOR FET	
Q1506	2SD0601ARL	TRANSISTOR SI NPN CHIP	
Q1507	2SD0601ARL	TRANSISTOR SI NPN CHIP	
Q1508	B1CHND000004	TRANSISTOR FET	
Q1509	B1CHND000004	TRANSISTOR FET	
Q1510	B1CBGD000001	TRANSISTOR FET CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
Q1601	B1CFDF000004	TRANSISTOR FET	
Q1602	B1CFDF000004	TRANSISTOR FET	
Q1801	B1CARQ000001	TRANSISTOR FET	Δ
Q1802	2SD0601ARL	TRANSISTOR SI NPN CHIP	
Q1804	B1ADPC000003	TRANSISTOR SI PNP CHIP	
Q1903	2SD0601ARL	TRANSISTOR SI NPN CHIP	
Q1904	B1CHGD000006	TRANSISTOR FET	
Q1906	B1CHGD000006	TRANSISTOR FET	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D1001	B0FBFR000037	DIODE SI	Δ
D1301	MA2C18800E	DIODE SI	
D1302	MA2C18800E	DIODE SI	
D1303	MA3X15300L	DIODE SI CHIP	
D1304	MA3X15300L	DIODE SI CHIP	
D1305	B0JBSD000027	DIODE SI	
D1307	MAZ41000MF	DIODE ZENER 10V	
D1309	B0AANM000004	DIODE SI	
D1310	B0AANM000004	DIODE SI	
D1311	B0AANM000004	DIODE SI	
D1312	B0AANM000004	DIODE SI	
D1313	B0AANM000004	DIODE SI	
D1315	B0AANM000004	DIODE SI	
D1317	B0HBRP000007	DIODE SI	
D1318	MAZ40750MF	DIODE ZENER 7.5V	
D1319	MA2J11100L	DIODE SI CHIP	
D1320	MAZ41000MF	DIODE ZENER 10V	
D1321	MAZ40750MF	DIODE ZENER 7.5V	
D1322	MAZ43000MF	DIODE ZENER 30V	
D1323	MAZ43000MF	DIODE ZENER 30V	
D1324	MAZ43000MF	DIODE ZENER 30V	
D1325	MAZ43000MF	DIODE ZENER 30V	
D1326	MA2J11100L	DIODE SI CHIP	
D1327	MAZ41500MF	DIODE ZENER 15V	
D1328	MAZ73000BF	DIODE ZENER 30V	
D1329	MAZ43000MF	DIODE ZENER 30V	
D1330	MAZ43000MF	DIODE ZENER 30V	
D1331	MAZ43000MF	DIODE ZENER 30V	
D1332	MAZ43000MF	DIODE ZENER 30V	
D1403	B0AAPP000006	DIODE SI	
D1404	B0HAMP000092	DIODE SI	
D1405	B0AAPP000006	DIODE SI	
D1406	B0AAPP000006	DIODE SI	
D1505	B2ZAZ0000042	DIODE SI	
D1506	MAZ42000MF	DIODE ZENER 20V	
D1512	MA2C165001VT	DIODE SI	
D1513	MA2C165001VT	DIODE SI	
D1514	MA2C165001VT	DIODE SI	
D1519	B0HAMP000092	DIODE SI	
D1523	MA2C18800E	DIODE SI	
D1524	MA2C18800E	DIODE SI	
D1526	MA2C18800E	DIODE SI	
D1527	MAZ4082NHF	DIODE ZENER 8.2V	
D1528	B0AAMP000003	DIODE SI	
D1529	B0AAMP000003	DIODE SI	
D1530	B0HAMP000092	DIODE SI	
D1531	B0AANM000004	DIODE SI	
D1532	B0AANM000004	DIODE SI	
D1533	MA3J142D0L	DIODE SI CHIP	
D1804	MA2C18800E	DIODE SI	
D1805	B0HAPR000015	DIODE SI	Δ
D1807	MAZ4082NMF	DIODE ZENER 8.2V	
D1808	B0HAPR000015	DIODE SI	Δ
D1931	B0HAMP000093	DIODE SI	
D1932	B0AAMV000002	DIODE SI	
D1933	MA2C18800E	DIODE SI	
D1934	B0BB17000009	DIODE ZENER 17V	
D1935	B0JAME000078	DIODE SI	
D1936	MA2C18800E	DIODE SI	
D1937	B0EDKT000009	DIODE SI CHIP	Δ
D1940	B0HANM000028	DIODE SI	
D1941	MAZ4082NMF	DIODE ZENER 8.2V	

Ref. No.	Part No.	Part Name & Description	Remarks
D1997	MAZ41500MF	DIODE ZENER 15V	
D1998	MAZ41500MF	DIODE ZENER 15V	
D1999	MAZ41500MF	DIODE ZENER 15V	
ZN1001	ERZVGAD681T2	SURGE ABSORBER 680V	△
ZN1801	ERZVGAD681T2	SURGE ABSORBER 680V	△

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R1001	ERDS1FJ474T	CARBON 1/2W 470K	△
R1002	D0BF825JA030	METAL FILM 1/2W 8.2M	△
R1003	ERJ8ENF1803V	MGF CHIP 1/8W 180K	
R1004	ERJ8ENF1803V	MGF CHIP 1/8W 180K	
R1005	D1F5100E0002	W FLMPRF 5W 10	△
R1006	ERJ8GEYJ562V	MGF CHIP 1/8W 5.6K	
R1007	ERJ8ENF1803V	MGF CHIP 1/8W 180K	
R1008	ERJ8ENF1803V	MGF CHIP 1/8W 180K	
R1009	ERJ8GEYJ562V	MGF CHIP 1/8W 5.6K	
R1010	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R1011	ERJ6GEYJ152V	MGF CHIP 1/10W 1.5K	
R1012	ERJ6GEYJ305V	MGF CHIP 1/10W 3M	
R1013	ERJ6GEYJ305V	MGF CHIP 1/10W 3M	
R1301	ERJ8GEYJ331V	MGF CHIP 1/8W 330	
R1302	ERJ8GEYJ331V	MGF CHIP 1/8W 330	
R1303	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1304	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1306	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R1307	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R1308	ERJ6GEYJ220V	MGF CHIP 1/10W 22	
R1309	D1BZR060A014	MGF CHIP 1/16W 0.06	
R1310	D1BZR060A014	MGF CHIP 1/16W 0.06	
R1311	D1BZR060A014	MGF CHIP 1/16W 0.06	
R1312	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R1313	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R1314	ERJ8ENF2700V	MGF CHIP 1/8W 270	
R1315	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R1316	ERJ6GEYJ000V	MGF CHIP 1/10W 0	
R1317	ERJ6GEYJ822V	MGF CHIP 1/10W 8.2K	
R1318	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1320	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1321	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1322	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1323	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1324	EVMAASA00B53	VARIABLE 5K	
R1325	ERJ6GEYJ222V	MGF CHIP 1/10W 2.2K	
R1328	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1329	ERJ6ENF3001V	MGF CHIP 1/10W 3K	
R1330	ERX2SJW2R2E	METAL FILM 2W 2.2	
R1404	ERJ8GEYJ101V	MGF CHIP 1/8W 100	
R1405	ERJ8ENF3300V	MGF CHIP 1/8W 330	
R1408	ERX2SZGWR47E	METAL FILM 2W 0.47	
R1409	ERX2SZGWR47E	METAL FILM 2W 0.47	
R1410	ERX2SZGWR47E	METAL FILM 2W 0.47	
R1411	ERX2SZGWR47E	METAL FILM 2W 0.47	
R1426	ERJ8GEYJ4R7V	MGF CHIP 1/8W 4.7	
R1429	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1501	ERG2SGW331E	METAL OXIDE 2W 330	
R1511	ERG2SJW123E	METAL OXIDE 2W 12K	
R1512	ERG2SJW123E	METAL OXIDE 2W 12K	
R1513	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R1514	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1518	ERJ8GEYJ221V	MGF CHIP 1/8W 220	
R1519	ERJ8GEYJ220V	MGF CHIP 1/8W 22	
R1520	ERJ8GEYJ220V	MGF CHIP 1/8W 22	
R1521	ERF10TJ391	W FLMPRF 10W 390	
R1522	ERJ8GEYJ103V	MGF CHIP 1/8W 10K	
R1523	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R1524	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R1525	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R1530	ERJ6ENF1102V	MGF CHIP 1/10W 11K	
R1531	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1533	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1534	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1535	ERJ6GEYJ101V	MGF CHIP 1/10W 100	

Ref. No.	Part No.	Part Name & Description	Remarks
R1539	ERJ6ENF1102V	MGF CHIP 1/10W 11K	
R1544	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1545	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1546	ERJJP08D7501V	MGF CHIP 1/3W 7.5K	
R1547	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1548	ERJ6GEYJ513V	MGF CHIP 1/10W 51K	
R1549	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R1550	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1551	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1552	ERJJP08D7501V	MGF CHIP 1/3W 7.5K	
R1554	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1556	ERJJP08D7501V	MGF CHIP 1/3W 7.5K	
R1557	ERJJP08D7501V	MGF CHIP 1/3W 7.5K	
R1558	ERJJP08D7501V	MGF CHIP 1/3W 7.5K	
R1559	ERJJP08D7501V	MGF CHIP 1/3W 7.5K	
R1601	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1602	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1603	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R1604	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1605	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R1606	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1700	ERG2SJW560E	METAL OXIDE 2W 56	
R1701	ERG2SJW560E	METAL OXIDE 2W 56	
R1703	EVMAASA00B33	VARIABLE 3K	
R1704	ERJ6GEYJ100V	MGF CHIP 1/10W 10	
R1705	ERJ6GEYJ100V	MGF CHIP 1/10W 10	
R1805	ERJ8GEYJ220V	MGF CHIP 1/8W 22	
R1806	ERJ8GEYJ101V	MGF CHIP 1/8W 100	
R1807	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1808	ERJ8ENF2263V	MGF CHIP 1/8W 226K	
R1809	ERJ8ENF2263V	MGF CHIP 1/8W 226K	
R1810	ERJ8ENF2263V	MGF CHIP 1/8W 226K	
R1811	ERJ8ENF2263V	MGF CHIP 1/8W 226K	
R1812	ERJ6GEYJ473V	MGF CHIP 1/10W 47K	
R1813	ERJ8GEYJ434V	MGF CHIP 1/8W 430K	
R1814	ERJ8GEYJ434V	MGF CHIP 1/8W 430K	
R1815	ERJ8GEYJ434V	MGF CHIP 1/8W 430K	
R1816	ERJ6ENF1202V	MGF CHIP 1/10W 12K	
R1817	ERX2SJWR33E	METAL FILM 2W 0.33	
R1818	ERJ6RBD472V	MGF CHIP 1/10W 4.7K	
R1819	ERX2SJWR33E	METAL FILM 2W 0.33	
R1820	ERJ6RBD1001V	MGF CHIP 1/10W 1K	
R1821	ERJ8ENF3603V	MGF CHIP 1/8W 360K	
R1822	ERJ6GEYJ331V	MGF CHIP 1/10W 330	
R1823	ERJ8ENF3603V	MGF CHIP 1/8W 360K	
R1824	ERJ8GEYJ101V	MGF CHIP 1/8W 100	
R1825	ERJ8ENF3603V	MGF CHIP 1/8W 360K	
R1826	ERJ6ENF1802V	MGF CHIP 1/10W 18K	
R1827	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R1828	ERJ6ENF1201V	MGF CHIP 1/10W 1.2K	
R1830	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1831	ERJ8GEYJ242V	MGF CHIP 1/8W 2.4K	
R1832	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1833	ERJ8GEYJ474V	MGF CHIP 1/8W 470K	
R1907	ERJ8GEYJ242V	MGF CHIP 1/8W 2.4K	
R1908	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R1909	ERJ6GEYJ333V	MGF CHIP 1/10W 33K	
R1910	ERJ6GEYJ103V	MGF CHIP 1/10W 10K	
R1911	ERJ6GEYJ223V	MGF CHIP 1/10W 22K	
R1931	ERJ6GEYJ274V	MGF CHIP 1/10W 270K	
R1932	ERJ6GEYJ153V	MGF CHIP 1/10W 15K	
R1933	ERJ8GEYJ100V	MGF CHIP 1/8W 10	
R1935	ERJ6ENF1802V	MGF CHIP 1/10W 18K	
R1936	ERJ6GEYJ000V	MGF CHIP 1/10W 0	
R1937	ERJ6ENF1002V	MGF CHIP 1/10W 10K	
R1938	ERJ8GEYJ2R2V	MGF CHIP 1/8W 2.2	
R1940	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1941	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1942	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1943	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1944	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1948	ERJ6ENF3301V	MGF CHIP 1/10W 3.3K	
R1949	ERJ6ENF1201V	MGF CHIP 1/10W 1.2K	

Ref. No.	Part No.	Part Name & Description	Remarks
R1950	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1951	EVMAASA00B23	VARIABLE 2K	
R1952	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1953	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R1954	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1955	ERJ6GEYJ104V	MGF CHIP 1/10W 100K	
R1956	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R1957	ERG2SJW102E	METAL OXIDE 2W 1K	
R1958	ERJ6GEYJ2R2V	MGF CHIP 1/10W 2.2	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C1003	ECQU2A334ML	POLYESTER 250V 0.33UF	△
C1007	ECKNNA331KB	CERAMIC 250V 330PF	△
C1008	ECKENA331KB	CERAMIC 250V 330PF	△
C1015	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1016	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1017	ECJ2VB1H102K	C CHIP 50V 1000PF	
C1018	ECQU2A474ML	POLYESTER 250V 0.47UF	△
C1019	ECJ2VB1H102K	C CHIP 50V 1000PF	
C1021	FLJ1C1050011	C CHIP 16V 1UF	
C1022	FLJ1C1050011	C CHIP 16V 1UF	
C1302	F1A3A221A040	CERAMIC 1KV 220PF	
C1303	F0C3C153A035	POLYESTER 1.6KV 0.015UF	
C1304	F2A1C1520023	ELECTROLYTIC 16V 1500UF	
C1305	F1A3A221A040	CERAMIC 1KV 220PF	
C1306	ECKNNA222ME	CERAMIC 4KV 2200PF	△
C1307	F2A1V6810024	ELECTROLYTIC 35V 680UF	
C1309	F2A1C1520023	ELECTROLYTIC 16V 1500UF	
C1310	F2A2C1510004	ELECTROLYTIC 160V 150UF	△
C1311	F2A2C1510004	ELECTROLYTIC 160V 150UF	△
C1312	ECJ2VB1H333K	C CHIP 50V 0.033UF	
C1313	ECJ2YB1H104K	C CHIP 50V 0.1UF	
C1314	ECJ2FB1E105K	C CHIP 25V 1UF	
C1315	ECJ2FB1E105K	C CHIP 25V 1UF	
C1317	ECJ2VB1H102K	C CHIP 50V 1000PF	
C1320	F2A1E470A453	ELECTROLYTIC 25V 47UF	
C1321	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1322	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1403	F1A3A221A040	CERAMIC 1KV 220PF	
C1506	ECWH20302HVB	POLYESTER 2KV 3000PF	
C1507	ECWF2104JSB	POLYESTER 250V 0.1UF	
C1509	ECWF2105JSB	POLYESTER 250V 1UF	
C1510	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1523	F2A2E6800004	ELECTROLYTIC 250V 68UF	
C1526	F1A3D101A010	CERAMIC 2KV 100PF	
C1527	F1A3D101A010	CERAMIC 2KV 100PF	
C1528	F1A3D101A010	CERAMIC 2KV 100PF	
C1529	F1A3D101A010	CERAMIC 2KV 100PF	
C1530	ECJ2VC1H102J	C CHIP 50V 1000PF	
C1531	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1532	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1535	ECWH20302HVB	POLYESTER 2KV 3000PF	
C1536	F2A1E470A453	ELECTROLYTIC 25V 47UF	
C1537	ECJ2VC1H102J	C CHIP 50V 1000PF	
C1538	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1601	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1602	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1603	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1604	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1801	F0CZZ4750001	POLYESTER 4.7UF	
C1803	F1A3A221A040	CERAMIC 1KV 220PF	
C1804	ECJ2FB1C474K	C CHIP 16V 0.47UF	
C1805	ECJ2YB1H104K	C CHIP 50V 0.1UF	
C1806	F2A1E4700084	ELECTROLYTIC 25V 47UF	
C1810	F2B2W3910005	ELECTROLYTIC 450V 390UF	△
C1811	ECJ2FB1C105K	C CHIP 16V 1UF	
C1812	ECJ2YB1H104K	C CHIP 50V 0.1UF	
C1813	FLJ1H471A324	C CHIP 50V 470PF	
C1814	F1E2J4730001	CERAMIC 630V 0.047UF	
C1824	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1825	ECJ2VC1H331J	C CHIP 50V 330PF	
C1826	ECJ2VB1H103K	C CHIP 50V 0.01UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C1905	F2A1V1510021	ELECTROLYTIC 35V 150UF	
C1908	ECJ2VB1H102K	C CHIP 50V 1000PF	
C1909	ECJ2VB1H103K	C CHIP 50V 0.01UF	
C1931	ECJ2VC1H101J	C CHIP 50V 100PF	
C1932	ECJ2VB1H102K	C CHIP 50V 1000PF	
C1933	ECJ2YB1H104K	C CHIP 50V 0.1UF	
C1934	ECJ2YB1H104K	C CHIP 50V 0.1UF	
C1935	F2A1E1500001	ELECTROLYTIC 25V 15UF	
C1936	ECJ2VC1H471J	C CHIP 50V 470PF	
C1937	F2A1V1510021	ELECTROLYTIC 35V 150UF	
C1938	ECJ2FB1C105K	C CHIP 16V 1UF	
C1939	F2A2T1510001	ELECTROLYTIC 220V 150UF	△
C1940	ECJ2VC1H471J	C CHIP 50V 470PF	
C1941	F2A1V1510021	ELECTROLYTIC 35V 150UF	
C1942	ECKNNA221KB	CERAMIC 4KV 220PF	△
C1943	F2A1E1500001	ELECTROLYTIC 25V 15UF	
C1945	ECJ2VB1H102K	C CHIP 50V 1000PF	
C1946	ECJ2VB1H102K	C CHIP 50V 1000PF	
C1947	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C1948	F2A1E470A453	ELECTROLYTIC 25V 47UF	
C1949	F2A1E470A453	ELECTROLYTIC 25V 47UF	
C1950	F2A1E470A453	ELECTROLYTIC 25V 47UF	
C1951	F2A1E470A453	ELECTROLYTIC 25V 47UF	
C1952	ECJ2VB1H102K	C CHIP 50V 1000PF	
C1953	ECJ2VB1H102K	C CHIP 50V 1000PF	
C1954	F1A3A102A040	CERAMIC 1KV 1000PF	
C1999	ECJ2VB1H103K	C CHIP 50V 0.01UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L1001	G0B153H00006	LINE FILTER	△
L1002	G0B153H00006	LINE FILTER	△
L1003	ELF17N002A	LINE FILTER 142MH	△
L1301	EXCELDR35V	EMI BEADS CORE	
L1302	J0JKB0000038	COIL	
L1303	J0JKB0000037	INDUCTOR	
L1304	J0JKB0000037	INDUCTOR	
L1305	J0JKB0000037	INDUCTOR	
L1401	EXCELDR35V	EMI BEADS CORE	
L1501	G4D2A0000271	TRANSFORMER SWITCHING	
L1502	G4D2A0000272	TRANSFORMER SWITCHING	
L1503	J0JKB0000038	COIL	
L1504	J0JKB0000038	COIL	
L1902	J0JKB0000038	COIL	
L1903	J0JKB0000038	COIL	
L1904	J0JKB0000037	INDUCTOR	
L1998	J0JKB0000037	INDUCTOR	
L1999	J0JKB0000037	INDUCTOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN1001	K1KA02A00593	CONNECTOR 2P	
CN1514	K1KA14BA0058	CONNECTOR 14P	
CN1516	K1KA02A00592	CONNECTOR 2P	
CN1520	K1KA02AA0193	CONNECTOR 2P	
CN1522	K1KA03BA0061	CONNECTOR 3P	

FUSE & PROTECTOR

Ref. No.	Part No.	Part Name & Description	Remarks
F1001	LSEK0755	FUSE 250V 6.3A	△
F1002	K5G162B00009	FUSE 250V 1.6A	△
PR1301	B1ZAZ0000016	IC PROTECTOR 2.5A	△
PR1302	B1ZAZ0000016	IC PROTECTOR 2.5A	△
PR1304	B1ZAZ0000016	IC PROTECTOR 2.5A	△
PR1305	K5Y502BA0001	FUSE 250V 5A	△

RELAY

Ref. No.	Part No.	Part Name & Description	Remarks
RL1902	K6B1AGA00238	RELAY	△
RL1903	K6B1AGA00238	RELAY	△

TRANSFORMER

Ref. No.	Part No.	Part Name & Description	Remarks
T1302	G4D1A0000098	TRANSFORMER SWITCHING	⚠
T1401	G4D3A0000192	TRANSFORMER SWITCHING	⚠
T1402	G4D2A0000273	TRANSFORMER SWITCHING	
T1405	ETQ11K5AZ	TRANSFORMER CURRENT	⚠
T1501	EULSPJ005A	TRANSFORMER HIGH-VOLTAGE	
T1801	G4D3A0000193	TRANSFORMER SWITCHING	
T1901	G4D2A0000274	TRANSFORMER SWITCHING	⚠

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
482	XYN3+J8FJ	SCREW W/WASHER,STEEL	
494	XYN3+J10FJ	SCREW,W/WASHER,STEEL	
721	LSEK0721	HEAT SINK UNIT	
722	LSEK0723	HEAT SINK UNIT	
723	LSEK0724	HEAT SINK UNIT	
725	LSSC0917	HEAT SINK	
764	VMTS0059	CUSHION,RUBBER	

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E31	LSEP1207A1	POWER CONTROL 1 P.C.B. NR	
E32	LSEP1208A1	POWER CONTROL 2 P.C.B. NR	

19.4.2. POWER CONTROL 2 P.C.B. NR

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
781	B1DFHM000005	TRANSISTOR FET	

19.4.3. LCD DRIVE P.C.B.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC2001	C1AB00002033	IC, LINEAR	
IC2002	C1AB00002033	IC, LINEAR	
IC2003	C1AB00002033	IC, LINEAR	
IC2004	C1AB00002033	IC, LINEAR	
IC2005	C1AB00002033	IC, LINEAR	
IC2006	C1AB00002033	IC, LINEAR	
IC2007	C1AB00002289	IC, LINEAR	
IC2008	C1AB00002289	IC, LINEAR	
IC2009	C1AB00002289	IC, LINEAR	
IC2301	MN101C77DAC	IC, 8BIT MICROCONTROLLER	E.S.D.
IC2302	LSSK0088	IC, EP ROM	E.S.D.
IC2303	C0EBE0000275	IC, LINEAR	
IC2304	C0JBAZ000994	IC, CMOS STANDARD LOGIC	E.S.D.
IC2305	C0JBAA000362	IC, CMOS STANDARD LOGIC	E.S.D.
IC2501	C0DBGYY00057	IC, LINEAR	
IC2502	C0CBCBD00008	IC, LINEAR	
IC2503	C1AB00002351	IC, LINEAR	CSP
IC2504	C0JBCZ000519	IC, CMOS STANDARD LOGIC	E.S.D.
IC2701	C0DBEKG00004	IC, LINEAR	
IC2702	C0DBEKG00003	IC, LIENAR	
IC2703	C0DBEKG00003	IC, LIENAR	
IC2704	C0DBEKG00003	IC, LIENAR	
IC2705	C0ABBA000137	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q2001	2SD1819AHL	TRANSISTOR SI NPN CHIP	
or Q2001	B1ABCF000020	TRANSISTOR SI NPN CHIP	
Q2002	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q2002	B1ADCF000063	TRANSISTOR SI PNP CHIP	
Q2302	2SK137400L	TRANSISTOR FET CHIP	
Q2303	2SK137400L	TRANSISTOR FET CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D2301	MA2J111008	DIODE SI CHIP	
or D2301	B0ACCK000005	DIODE SI CHIP	
or D2301	MA2J11100L	DIODE SI CHIP	
D2302	MA3J142E0L	DIODE SI CHIP	
or D2302	B0ADCG000012	DIODE SI CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R2001	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R2002	ERJ3GEYJ153V	MGF CHIP 1/16W 15K	
R2003	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2004	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2005	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2006	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2007	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2008	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2009	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2010	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2011	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2012	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2013	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2014	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2015	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2016	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2017	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2018	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2019	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2020	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2021	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2022	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2023	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2024	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2025	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2026	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2027	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2028	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2029	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2030	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2031	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2032	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2033	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2034	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2035	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2036	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2040	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2041	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2042	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2043	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2044	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2045	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2046	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2047	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2048	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2049	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2050	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2051	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2052	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2053	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2054	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2055	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2056	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2057	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2058	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2059	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2060	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2061	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2062	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2063	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2064	ERJ3GEYJ220V	MGF CHIP 1/16W 22	

Ref. No.	Part No.	Part Name & Description	Remarks
R2065	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2066	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2067	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2068	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2069	ERA3YED392V	MGF CHIP 1/16W 3.9K	
R2070	ERA3YED103V	MGF CHIP 1/16W 10K	
R2071	ERA3YED472V	MGF CHIP 1/16W 4.7K	
R2072	ERA3YED272V	MGF CHIP 1/16W 2.7K	
R2073	ERJ3GEYJ273V	MGF CHIP 1/16W 27K	
R2074	ERJ3GEYJ123V	MGF CHIP 1/16W 12K	
R2075	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2076	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2077	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2078	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2079	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2080	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2081	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2082	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2083	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2084	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2085	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2086	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2087	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2088	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2089	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2090	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2091	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2092	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2093	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2094	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2095	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2096	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2097	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2098	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2099	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2100	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2101	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2102	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2103	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2104	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2105	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2106	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2107	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2108	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2109	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2110	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2111	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2112	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2113	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2114	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2115	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2116	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2117	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2118	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2119	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2120	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2121	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2122	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2123	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2124	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2125	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2126	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2127	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2128	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2129	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2130	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2131	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2132	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2133	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2134	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2135	ERA3YED122V	MGF CHIP 1/16W 1.2K	
R2136	ERA3YED102V	MGF CHIP 1/16W 1K	
R2301	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R2302	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2303	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2304	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2305	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2306	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R2308	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R2309	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2310	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2313	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2314	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R2315	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2316	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2317	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2318	ERJ3GEYJ273V	MGF CHIP 1/16W 27K	
R2319	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2320	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2321	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2322	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2323	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2324	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2327	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R2328	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R2329	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R2331	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R2335	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2338	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2340	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2341	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2342	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2343	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2344	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2346	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2347	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2348	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2349	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2353	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2356	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2357	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2358	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2359	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2360	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2362	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2363	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2364	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2365	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2366	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2367	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2368	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2369	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2372	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2373	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2374	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2375	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2376	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2377	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2378	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2379	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2380	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2381	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2383	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2387	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2389	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2390	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2392	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2395	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2396	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2397	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2398	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2399	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2400	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R2401	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R2402	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2404	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	

Ref. No.	Part No.	Part Name & Description	Remarks
R2405	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2406	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2407	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2408	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2409	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2410	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R2411	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2412	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2413	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2414	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2416	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2417	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2418	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2420	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R2421	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R2422	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2425	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2427	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2429	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R2501	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2502	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2503	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2504	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2505	EXBV8V101JV	ARRAY CHIP 100	
R2506	EXBV8V101JV	ARRAY CHIP 100	
R2507	EXBV8V101JV	ARRAY CHIP 100	
R2508	EXBV8V101JV	ARRAY CHIP 100	
R2509	EXBV8V101JV	ARRAY CHIP 100	
R2510	EXBV8V101JV	ARRAY CHIP 100	
R2511	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2512	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2513	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2514	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2515	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2516	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2517	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2518	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2519	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2520	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2521	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2522	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2524	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2525	ERJ6GEYJ101V	MGF CHIP 1/10W 100	
R2526	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2527	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2528	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2529	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2530	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2531	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2532	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2533	EXBV8V101JV	ARRAY CHIP 100	
R2534	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2535	EXBV8V101JV	ARRAY CHIP 100	
R2537	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2539	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2540	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2541	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2543	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2545	EXBV8V101JV	ARRAY CHIP 100	
R2546	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2547	EXBV8V101JV	ARRAY CHIP 100	
R2548	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2549	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2550	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2551	EXBV8V101JV	ARRAY CHIP 100	
R2552	EXBV8V101JV	ARRAY CHIP 100	
R2553	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2554	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2555	EXBV8V101JV	ARRAY CHIP 100	
R2556	EXBV8V101JV	ARRAY CHIP 100	
R2557	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2558	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2559	ERJ3GEYJ470V	MGF CHIP 1/16W 47	

Ref. No.	Part No.	Part Name & Description	Remarks
R2560	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2561	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2562	EXBV8V101JV	ARRAY CHIP 100	
R2563	EXBV8V101JV	ARRAY CHIP 100	
R2564	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2565	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2566	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2567	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2568	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2569	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2570	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2571	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2572	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2573	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2574	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2575	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2576	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2577	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2578	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2579	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2580	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2581	EXBV8V101JV	ARRAY CHIP 100	
R2582	EXBV8V101JV	ARRAY CHIP 100	
R2701	ERJ8GEYJR47V	MGF CHIP 1/8W 0.47	
R2702	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R2703	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2706	ERA3YED153V	MGF CHIP 1/16W 15K	
R2707	ERA3YED122V	MGF CHIP 1/16W 1.2K	
R2708	ERJ3GEYJ752V	MGF CHIP 1/16W 7.5K	
R2712	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R2713	ERJ3GEYJ122V	MGF CHIP 1/16W 1.2K	
R2714	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R2716	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2717	ERA3YED223V	MGF CHIP 1/16W 22K	
R2718	ERA3YED223V	MGF CHIP 1/16W 22K	
R2719	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R2720	ERJ3EKF2201V	MGF CHIP 1/16W 2.2K	
R2726	ERJ3GEYJ122V	MGF CHIP 1/16W 1.2K	
R2727	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R2731	ERJ3GEYJ122V	MGF CHIP 1/16W 1.2K	
R2732	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R2740	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2741	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R2742	ERA3YKD473V	MGF CHIP 1/16W 47K	
R2743	ERJ12YJR68H	MGF CHIP 1/2W 0.68	
R2744	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C2001	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2002	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2003	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2004	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2005	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2006	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2007	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2008	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2009	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2010	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2011	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2012	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2013	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2014	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2015	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2016	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2017	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2018	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2019	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2020	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2021	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2022	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C2023	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2024	ECJ1VF1E104Z	C CHIP 25V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C2025	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2026	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2027	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2028	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2029	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2030	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2031	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2032	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2033	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	
C2034	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2035	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2036	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2037	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2038	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2039	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2040	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2041	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2042	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2043	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2044	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2045	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2046	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2047	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2048	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2049	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2050	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2051	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2052	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2053	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2054	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2055	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2056	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2057	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2058	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2059	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2060	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2061	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2062	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2064	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2065	F2H0J220A010	ELECTROLYTIC CHIP 6.3V 22UF	
C2066	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2067	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2068	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2069	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2070	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2071	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2072	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2073	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2074	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2075	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2076	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2077	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2078	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2079	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2080	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2081	F2H0J220A010	ELECTROLYTIC CHIP 6.3V 22UF	
C2083	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2084	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2085	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2086	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2087	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2088	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2089	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2090	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2091	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2092	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2093	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2094	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2095	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2096	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2097	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2098	F2H1E330A007	ELECTROLYTIC CHIP 25V 33UF	
C2099	F2H0J470A010	ELECTROLYTIC CHIP 6.3V 47UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C2100	F2H0J220A010	ELECTROLYTIC CHIP 6.3V 22UF	
C2105	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2302	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C2303	F1H1C104A008	C CHIP 16V 0.1UF	
C2308	F1H1C104A008	C CHIP 16V 0.1UF	
C2309	EEE0JA470SR	ELECTROLYTIC 6.3V 47UF	
C2311	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
C2317	F1H1C104A008	C CHIP 16V 0.1UF	
C2318	F1H1C104A008	C CHIP 16V 0.1UF	
C2320	F1H1C104A008	C CHIP 16V 0.1UF	
C2322	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C2323	EEE0JA220SR	ELECTROLYTIC 6.3V 22UF	
C2326	F1H1C104A008	C CHIP 16V 0.1UF	
C2327	EEE0JA220SR	ELECTROLYTIC 6.3V 22UF	
C2501	F1J0J106A004	C CHIP 6.3V 10UF	
C2502	F1J0J106A004	C CHIP 6.3V 10UF	
C2503	F1J0J106A004	C CHIP 6.3V 10UF	
C2505	F1J0J106A004	C CHIP 6.3V 10UF	
C2506	ECJ2YB0J225K	C CHIP 6.3V 2.2UF	
C2508	F1J0J106A004	C CHIP 6.3V 10UF	
C2509	F1H1C104A008	C CHIP 16V 0.1UF	
C2510	F1H1C104A008	C CHIP 16V 0.1UF	
C2511	F1H1C104A008	C CHIP 16V 0.1UF	
C2512	F1H1C104A008	C CHIP 16V 0.1UF	
C2514	F1H1C104A008	C CHIP 16V 0.1UF	
C2515	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C2516	F1H1C104A008	C CHIP 16V 0.1UF	
C2517	F1H1C104A008	C CHIP 16V 0.1UF	
C2518	F1H1C104A008	C CHIP 16V 0.1UF	
C2520	F1J0J106A004	C CHIP 6.3V 10UF	
C2521	F1J0J106A004	C CHIP 6.3V 10UF	
C2522	F1H1C104A008	C CHIP 16V 0.1UF	
C2523	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C2524	F1J1A1050002	C CHIP 10V 1UF	
C2525	F1H1C104A008	C CHIP 16V 0.1UF	
C2526	EEE0JA470SR	ELECTROLYTIC 6.3V 47UF	
C2527	F1H1C104A008	C CHIP 16V 0.1UF	
C2528	F1H1C104A008	C CHIP 16V 0.1UF	
C2529	F1H1C104A008	C CHIP 16V 0.1UF	
C2530	F1H1C104A008	C CHIP 16V 0.1UF	
C2531	F1H1C104A008	C CHIP 16V 0.1UF	
C2532	F1H1C104A008	C CHIP 16V 0.1UF	
C2533	F1H1C104A008	C CHIP 16V 0.1UF	
C2534	F1H1C104A008	C CHIP 16V 0.1UF	
C2535	F1H1C104A008	C CHIP 16V 0.1UF	
C2536	F1H1C104A008	C CHIP 16V 0.1UF	
C2537	F1H1C104A008	C CHIP 16V 0.1UF	
C2538	F1H1C104A008	C CHIP 16V 0.1UF	
C2539	F1H1C104A008	C CHIP 16V 0.1UF	
C2540	F1H1C104A008	C CHIP 16V 0.1UF	
C2541	F1H1C104A008	C CHIP 16V 0.1UF	
C2542	F1H1C104A008	C CHIP 16V 0.1UF	
C2543	F1H1C104A008	C CHIP 16V 0.1UF	
C2544	F1J0J106A004	C CHIP 6.3V 10UF	
C2545	F1H1C104A008	C CHIP 16V 0.1UF	
C2546	ECJ2YB0J225K	C CHIP 6.3V 2.2UF	
C2547	F1H1C104A008	C CHIP 16V 0.1UF	
C2548	F1H1C104A008	C CHIP 16V 0.1UF	
C2549	F1H1C104A008	C CHIP 16V 0.1UF	
C2550	ECJ2YB0J225K	C CHIP 6.3V 2.2UF	
C2701	F1K1A4750013	C CHIP 10V 4.7UF	
C2702	F1K1A4750013	C CHIP 10V 4.7UF	
C2703	F1K1A4750013	C CHIP 10V 4.7UF	
C2704	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2705	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2706	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2707	F1H1C104A008	C CHIP 16V 0.1UF	
C2708	F1H1C104A008	C CHIP 16V 0.1UF	
C2709	F1H1C104A008	C CHIP 16V 0.1UF	
C2710	F1H1C104A008	C CHIP 16V 0.1UF	
C2711	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2712	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2713	F1H1C104A008	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C2714	F1H1C104A008	C CHIP 16V 0.1UF	
C2715	F1H1C104A008	C CHIP 16V 0.1UF	
C2716	F1H1C104A008	C CHIP 16V 0.1UF	
C2717	F1H1C104A008	C CHIP 16V 0.1UF	
C2718	F1H1C104A008	C CHIP 16V 0.1UF	
C2719	F1H1C104A008	C CHIP 16V 0.1UF	
C2720	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2721	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2722	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C2723	F2H1E470A007	ELECTROLYTIC CHIP 25V 47UF	
C2724	F2H1V100A004	ELECTROLYTIC CHIP 35V 10UF	
C2725	F2G1V1000022	ELECTROLYTIC CHIP 35V 10UF	
C2727	F1J1A106A024	C CHIP 10V 10UF	
C2728	ECJ1VF1H103Z	C CHIP 50V 0.01UF	
C2729	F2H0J101A010	ELECTROLYTIC CHIP 6.3V 100UF	
C2730	F2H0J101A010	ELECTROLYTIC CHIP 6.3V 100UF	
C2731	ECJ1VB1C104K	C CHIP 16V 0.1UF	
C2732	F1H1C104A008	C CHIP 16V 0.1UF	
C2734	ECJ1VC1H470J	C CHIP 50V 47PF	
C2735	ECJ1VC1H470J	C CHIP 50V 47PF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L2001	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2002	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2003	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2004	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2005	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2006	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2007	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2008	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2009	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2010	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2011	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2012	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2013	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2014	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2015	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2016	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2301	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2302	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2304	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2506	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2507	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2508	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2509	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2510	J0JHC0000018	EMI FILTER CHIP	
L2511	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2512	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
L2513	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
L2514	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2701	J0JHC0000018	EMI FILTER CHIP	
L2702	J0JHC0000018	EMI FILTER CHIP	
L2703	J0JHC0000018	EMI FILTER CHIP	
L2704	J0JHC0000018	EMI FILTER CHIP	
L2705	J0JHC0000018	EMI FILTER CHIP	
L2707	J0JCC0000181	BEADS CORE	
L2708	J0JCC0000181	BEADS CORE	
L2709	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2710	J0JCC0000181	BEADS CORE	
L2711	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2712	J0JCC0000181	BEADS CORE	
L2713	J0JCC0000077	BEAD INDUCTOR CHIP 600UH	
L2715	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
L2716	ERJ3GEYJ470V	MGF CHIP 1/16W 47	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X2301	H2D800400017	CRYSTAL OSCILLATOR	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN2001	K1MY36BA0006	CONNECTOR 36P	
CN2002	K1MY36BA0006	CONNECTOR 36P	
CN2003	K1MY36BA0006	CONNECTOR 36P	
CN2301	K1KA02BA0047	CONNECTOR 2P	
CN2303	K1KA08AA0083	CONNECTOR 8P	
CN2501	K1KA02BA0014	CONNECTOR 2P	
CN2502	K1KA20B00153	CONNECTOR 20P	
CN2701	K1KA03AA0150	CONNECTOR 3P	
CN2702	K1KA03BA0047	CONNECTOR 3P	
CN2703	K1KA03BA0050	CONNECTOR 3P	
CN2704	K1KA08B00256	CONNECTOR 8P	
CN2705	K1KA07AA0083	CONNECTOR 7P	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
733	LSSC0880	LCD DRIVE SHIELD CASE TOP,STEEL	
734	LSSC0879	LCD DRIVE SHIELD CASE BOTTOM,STEEL	
763	LSMG0141	THERCOON SHEET	
766	LSMG0173	THERCOON SHEET	

19.4.4. THERMISTOR 2 P.C.B.

RESISTOR

Ref. No.	Part No.	Part Name & Description	Remarks
R2821	D4CE31330001	THERMISTOR	△

PIN HEADER

Ref. No.	Part No.	Part Name & Description	Remarks
P2821	K1KA02AA0300	CONNECTOR 2P	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
762	LSJA0533	CONNECTOR CABLE W/PLUG	

19.4.5. COVER SWITCH P.C.B.

PIN HEADER

Ref. No.	Part No.	Part Name & Description	Remarks
P2912	LSJA0551	CONNECTOR CABLE W/PLUG	

SWITCH

Ref. No.	Part No.	Part Name & Description	Remarks
SW2911	K0L1BA000114	SWITCH	

19.4.6. IRIS P.C.B.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC9500	C1BB00000818	IC, LINEAR	
IC9501	C0ABCA000064	IC, LINEAR	
IC9502	LSSK0096	IC, PIC MICROCONTROLLER	E.S.D.
IC9504	C0CBDD00004	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q9500	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q9501	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q9502	2SD1819A0L	TRANSISTOR SI NPN CHIP	
Q9503	2SB1218A0L	TRANSISTOR SI PNP CHIP	
Q9504	2SD1819A0L	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D9500	B0JCPD000026	DIODE SI CHIP	
D9501	B0JCPD000026	DIODE SI CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
D9502	MA3X152E0L	DIODE SI CHIP	
D9503	MA3X152E0L	DIODE SI CHIP	
D9504	MA3X15300L	DIODE SI CHIP	
D9505	MA3X704A0L	DIODE SI CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R9500	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R9501	ERJ3GEYJ124V	MGF CHIP 1/16W 120K	
R9502	ERJ3GEYJ510V	MGF CHIP 1/16W 51	
R9503	ERJ3GEYJ510V	MGF CHIP 1/16W 51	
R9504	ERJ3GEYJ124V	MGF CHIP 1/16W 120K	
R9505	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R9506	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R9507	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R9508	ERJ3EKF1691V	MGF CHIP 1/16W 1.69K	
R9509	ERJ3EKF1002V	MGF CHIP 1/16W 10K	
R9510	ERJ3EKF1002V	MGF CHIP 1/16W 10K	
R9511	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R9512	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R9513	ERJ6GEYJ471V	MGF CHIP 1/10W 470	
R9514	ERJ3EKF5903V	MGF CHIP 1/16W 590K	
R9515	ERJ3EKF5621V	MGF CHIP 1/16W 5.62K	
R9516	ERJ3EKF5621V	MGF CHIP 1/16W 5.62K	
R9517	ERJ3EKF3923V	MGF CHIP 1/16W 392K	
R9518	ERJ3EKF3923V	MGF CHIP 1/16W 392K	
R9519	ERJ3EKF3923V	MGF CHIP 1/16W 392K	
R9520	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R9521	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R9522	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R9523	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R9524	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R9525	ERJ3GEYJ224V	MGF CHIP 1/16W 220K	
R9526	ERJ3GEYJ122V	MGF CHIP 1/16W 1.2K	
R9527	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R9528	ERJ3GEYJ123V	MGF CHIP 1/16W 12K	
R9529	ERJ3EKF1101V	MGF CHIP 1/16W 1.1K	
R9530	ERJ3EKF1101V	MGF CHIP 1/16W 1.1K	
R9531	ERJ3EKF1101V	MGF CHIP 1/16W 1.1K	
R9532	ERJ3GEYJ124V	MGF CHIP 1/16W 120K	
R9533	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R9534	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R9535	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9536	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9537	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R9538	ERJ3GEYJ241V	MGF CHIP 1/16W 240	
R9539	ERJ3GEYJ681V	MGF CHIP 1/16W 680	
R9540	ERJ3GEYJ821V	MGF CHIP 1/16W 820	
R9541	ERJ6GEYJ105V	MGF CHIP 1/10W 1M	
R9542	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R9543	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R9544	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R9545	EXB38V220JV	ARRAY CHIP 22	
R9546	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R9547	EXB38V220JV	ARRAY CHIP 22	
R9552	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R9553	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R9554	ERJ3GEYJ220V	MGF CHIP 1/16W 22	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C9500	ECJ1VF1C105Z	C CHIP 16V 1UF	
C9501	ECJ1VF1C105Z	C CHIP 16V 1UF	
C9502	ECJ1VF1C105Z	C CHIP 16V 1UF	
C9503	ECJ1VF1C105Z	C CHIP 16V 1UF	
C9504	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C9505	ECJ1VC1H221J	C CHIP 50V 220PF	
C9506	ECJ1VF1C105Z	C CHIP 16V 1UF	
C9507	ECJ2VB1C224K	C CHIP 16V 0.22UF	
C9508	ECJ1VF1C105Z	C CHIP 16V 1UF	
C9509	ECJ1VF1C474Z	C CHIP 16V 0.47UF	
C9510	ECJ1VF1C474Z	C CHIP 16V 0.47UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C9511	ECJ1VC1H070C	C CHIP 50V 7PF	
C9512	ECJ1VC1H070C	C CHIP 50V 7PF	
C9513	ECJ1VF1C105Z	C CHIP 16V 1UF	
C9514	ECJ1VF1C105Z	C CHIP 16V 1UF	
C9515	ECJ2VB1H152K	C CHIP 50V 1500PF	
C9516	ECJ2VB1H821K	C CHIP 50V 820PF	
C9517	ECJ2VB1H472K	C CHIP 50V 4700PF	
C9518	ECJ2VB1H332K	C CHIP 50V 3300PF	
C9519	F2G1C470A022	ELECTROLYTIC CHIP 16V 47UF	
C9520	ECJ1VF1C105Z	C CHIP 16V 1UF	
C9521	F2G1C470A022	ELECTROLYTIC CHIP 16V 47UF	
C9522	F2G1C470A022	ELECTROLYTIC CHIP 16V 47UF	
C9523	F2G0J470A019	ELECTROLYTIC CHIP 6.3V 47UF	
C9524	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C9525	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C9526	ECJ1VF1E104Z	C CHIP 25V 0.1UF	
C9527	F2G1C470A022	ELECTROLYTIC CHIP 16V 47UF	
C9531	ECJ2YF1C225Z	C CHIP 16V 2.2UF	
C9532	ECJ1VB1H102K	C CHIP 50V 1000PF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL9500	ELKE103FA	COIL CHIP EMI	
FL9501	ELKE103FA	COIL CHIP EMI	
FL9502	ELKE103FA	COIL CHIP EMI	
FL9504	ELKE103FA	COIL CHIP EMI	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L9500	G1C330MA0153	COIL CHIP 33UH	
L9501	G1C330MA0153	COIL CHIP 33UH	
L9502	J0JHC0000031	EMI FILTER CHIP	
L9504	J0JHC0000031	EMI FILTER CHIP	
L9505	J0JBC00000080	FILTER FOR EMI / EMC	
L9506	J0JBC00000080	FILTER FOR EMI / EMC	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X9500	H0J200500024	CRYSTAL OSCILLATOR CHIP	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN9500	K1KA09AA0051	CONNECTOR 9P	
CN9501	K1KA05AA0104	CONNECTOR 5P	
CN9502	K1KA07AA0104	CONNECTOR 7P	

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
731	LSSC0884	IRIS SHIELD CASE TOP,STEEL	
732	LSSC0885	IRIS SHIELD CASE BOTTOM,STEEL	

19.4.7. HALL-S P.C.B.

INTEGRATED CIRCUIT

Ref. No.	Part No.	Part Name & Description	Remarks
HE9700	B4ABA0000009	HALL IC	

RESISTOR

Ref. No.	Part No.	Part Name & Description	Remarks
R9700	EXB38V220JV	ARRAY CHIP 22	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN9700	K1KA09AA0051	CONNECTOR 9P	
CN9701	K1MN06BA0113	CONNECTOR 6P	

19.4.8. ELECTRICAL PARTS LOCATED ON CHASSIS

FUSE & PROTECTOR

Ref. No.	Part No.	Part Name & Description	Remarks
F001	LSJA0583	THERMAL FUSE UNIT	⚠